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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

THE EFFECTS OF WITHIN-SCHOOL CONSULTATION
ON GENERAL EDUCATION TEACHERS' USE OF
BEHAVIOR-SPECIFIC PRAISE WITH STUDENTS
WITH EMOTIONAL DISABILITIES

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Darrelanne M. Sundeen

College of Education and Behavioral Sciences
School of Special Education

December 2018

This Dissertation by: Darrelanne M. Sundeen

Entitled: *The Effects of Within-school Consultation on General Education Teachers' Use of Behavior-specific Praise with Students with Emotional Disabilities*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in School of Special Education, Program of Special Education

Accepted by the Doctoral Committee

Robin Brewer, Ed.D. Research Advisor

Rashida Banerjee, Ph.D., Committee Member

Amy Graefe, Ph.D., Committee Member

Spencer Weiler, Ph.D., Faculty Representative

Date of Dissertation Defense _____

Accepted by the Graduate School

Linda L. Black, Ed.D.
Associate Provost and Dean
Graduate School and International Admissions
Research and Sponsored Projects

ABSTRACT

Sundeen, Darrelanne M. *The Effects of Within-school Consultation on General Education Teachers' Use of Behavior-specific Praise with Students with Emotional Disabilities*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2018.

Students identified with emotional disabilities (ED) are increasingly being included in the general education academic classrooms. Most general education academic teachers have little training or exposure to the characteristics and interventions associated with students with ED. Behavior-specific praise (BSP) has been shown to be an effective intervention for decreasing problem behaviors in the classroom. Unfortunately, studies have shown that teachers generally provide low rates of praise to secondary students and less so to secondary students with ED. This study used a multiple baseline single-subject design across participants to assess whether the use of within-school consultation intervention which involved regular structured meetings and visual performance feedback influenced the use of BSP, general praise, and reprimands used with students with ED in the general education academic setting.

Three general education academic middle school teachers and four observers participated in this study. All teachers were taught to increase their use of BSP through the use of a within-school consultation intervention. Through direct observation, the rates of BSP directed towards the target student with ED were recorded. Results of the study showed that the use of the within-school consultation model increased the rate of BSP

towards all three target students with ED. Specific praise rates increased for each general education academic teacher when the within-school consultation intervention was implemented. In addition to BSP rates, the use of general praise increased and the use of reprimands decreased. However, maintenance of the increased rate of BSP was not stable following the termination of the intervention. Implications suggest that one-time training or professional development may not provide enough support to effectively initiate or sustain change in teacher behavior. Results also imply that teachers would rather learn from other teachers. Additionally, results implicated that the use of BSP promotes positive academic and behavioral outcomes.

DEDICATION

I would like to dedicate this dissertation to my incredible family. To my husband and best friend who consistently provided me the never-ending support to continue through this long, long process. Thank you for cooking, cleaning, and everything else that needed to be done to keep our house going while I sat at my computer. Thank you for listening to my challenges and telling me to keep going. I am looking forward to having conversations with you without having a computer in my lap. Thank you for not allowing me to give up.

To our children, who have asked me repeatedly when would I be done with school. Thank you for your patience and flexibility. Thank you for all of your support, encouragement, and your belief in me that I could do this. I could not have completed this process without the sacrifices each one of you have made for me to get here. This accomplishment is just as much yours as it is mine.

To my mother, who completed the 8th grade and always dreamed about graduating high school, I wish you were here.

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Additionally, I would like to thank the school district and the school principal for providing me the permissions to conduct this study. I would also like to thank the participants for their professionalism, time, and dedication to students with emotional disabilities.

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CHAPTER I

INTRODUCTION

More secondary students with emotional disabilities (ED) are being educated alongside their peers without disabilities in general education classrooms (Bradley, Doolittle, & Bartolotta, 2008; Duncan, Dufrene, Sterling, & Tingstrom, 2013). Compared to their non-disabled peers, students with ED often demonstrate increased problematic behavior in the classroom (Gable, Tonelson, Sheth, Wilson, & Park, 2012). Additionally, disruptive behaviors demonstrated during classroom instruction often result in off-task behaviors (Adera & Bullock, 2010). Research also indicates that when students are on-task during academic instruction, academic success is more likely to occur (Morgan, Hsiao, Dobbins, Brown, & Lyons, 2015). In fact, various evidence-based practices focusing on increasing student on-task behavior have been reviewed through the literature and show positive results (e.g., academic growth or behavior) when students are on-task (e.g., Katie & Shogren, 2014; King, Radley, Jenson, Clark, & O'Neill, 2014; Weeden, Willis, Kottwitz, & Kamps, 2016).

One recommended evidence-based practice to increase student on-task behaviors is the use of praise (Allday et al., 2012; Hawkins & Heflin, 2011; Sutherland, Wehby, & Copeland, 2000). Although the use of praise has increased on-task behavior, research results indicate teachers' use of praise in the classroom is minimal (Rathel, Drasgow, Brown, & Marshall, 2014; Sullivan & Sadeh, 2014). Teachers often default to the use of

reprimands as a deterrent to off-task behaviors demonstrated by students with ED, rather than using praise to support on-task classroom behaviors (Merrett & Wheldall, 1992; Nocera, Whitbread, & Nocera, 2014). The research supports that in order for teachers to increase and maintain the use of praise in the classroom, teachers must be provided training and ongoing support (Allday et al., 2012).

The effects of a within-school consultation model provided to academic middle school teachers to improve the rate of behavior-specific praise (BSP) used with students with ED during classroom instruction was examined in this study. An overview of inclusion characteristics associated with students with an emotional disability and the poor academic and behavioral outcomes of students with ED is provided in this chapter. In addition, barriers to evidence-based practices (EBP) used with students with ED is discussed. The benefits of general educators utilizing BSP with students with ED is described. A discussion of the underutilization of this strategy is provided as the basis for the current study, followed by the research questions that guided this study.

Statement of the Problem

Special education teachers learn strategies for working with students with disabilities. However, professional development, trainings, and supports provided to general education teachers may not provide the level of assistance needed to support the diverse academic and behavioral needs associated with students with disabilities (Wehby & Kern, 2014). The lack of training and support may lead to general education teacher's concern, anxiety, and negative perceptions of the inclusion of students with disabilities (Peebles & Mendaglio, 2014).

Inclusion

No Child Left Behind (NCLB, 2001) was a federal law that mandated substantial changes in the educational environment which included high-stakes and standards-based testing (Zigmond, Kloo, & Volonino, 2009). This legislation initiated a dramatic shift in instructional delivery in schools and compelled all educational professionals to align curriculum to state standards. This shift also caused a direct change in instructional practices that influenced the academic success of all students, including students with disabilities (Duncan et al., 2013; Scruggs, Mastropieri, Berkeley, & Graetz, 2010).

Characteristics of Students with an Emotional Disability

Students with ED are typically characterized by severe and chronic problematic internalizing and externalizing behaviors (Gage, 2013). These behaviors range in type and severity that may be expressed as anxiety, depression, non-compliance, impaired social interactions, and a disregard for rules and authority (Bradshaw, Buckley, & Ialongo, 2008; Lane, Oakes, Carter, Lambert, & Jenkins, 2013; Lane, Wehby, Robertson, & Rogers, 2007). The characteristics associated with students with ED distinguishes them from other students with or without disabilities due to the severity of challenging behaviors often demonstrated in the classroom setting (Simpson, Peterson, & Smith, 2011).

According to the eligibility criteria for students with ED established by The Individuals with Disabilities Act (IDEA, 2004), a student must exhibit one or more of five conditions: (a) the inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) the inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behaviors or feelings

under normal circumstances; (d) a general pervasive mood of unhappiness or depression; and (e) a tendency to develop physical symptoms or fears associated with personal or school problems. Behaviors must also adversely affect a child's educational progress over a long period of time and across multiple settings.

The internalizing behaviors (e.g., anxiety or depression) and externalizing behaviors (e. g., physically or verbally acting out) associated with students with ED are often demonstrated across multiple settings (Cloth, Evans, Becker, & Paternite, 2014). Behaviors must also adversely affect a child's educational progress over a long period of time.

Outcomes for Students with Emotional Disabilities

Students identified with ED exhibit a disproportionately higher level of inappropriate behaviors in the classroom setting compared to other disability groups (Gable et al., 2012; Landrum, Tankersley, & Kauffman, 2003). The internalizing and/or externalizing behaviors associated with students with ED are often incompatible with the demands and expectations of a typical classroom setting. The complex behaviors demonstrated by students with ED often impede access to the general education curriculum and the general education learning environments (Rice & Yen, 2010). This cycle often contributes to significant deficits in academic skills needed to access content area curriculum (Bradley et al., 2008; Wiley, Siperstein, Forness, & Brigham, 2010).

In addition to poor performance in subject areas, students with ED experience failure across a broader scale. Students with ED are also the least likely to graduate and are more likely to drop out or be expelled than any other subgroup with disabilities (Landrum et al., 2003; Trainor, Morningstar, & Murray, 2016).

Evidence-Based Practices

While research indicates several suppositions as to why students with ED are not succeeding, one possible barrier to the success of students with ED may be the discrepancy between research to practice (Fitzpatrick & Knowlton, 2009; McGoey et al., 2014). The gap in research to practice is a twofold problem. First, the field of ED is in dire need of academic and functional EBPs that have been consistently shown to be effective by credible research (Cook & Cook, 2013; Rock et al., 2009). Second, researchers must commit to disseminating EBPs in a practitioner-friendly manner (Cook & Cook, 2013). Although there have been advances in approaches and techniques regarding the implementation of EBPs for elementary and secondary students with disabilities, underlying issues continue to plague school-based EBP intervention implementation (Bambara, Goh, Kern, & Caskie, 2012; Lohrmann, Martin, & Patil, 2013; McGoey et al., 2014). Research indicates that the lack of time to learn and incorporate the EBP into the classroom setting is one such issue (e.g., Kalis, Vannest, & Parker, 2007; Vannest & Hagan-Burke, 2010; Vannest & Parker, 2010).

For instance, Santoli, Sachs, Romey, and McClurg (2008) conducted a two-part survey examining barriers associated with EBP implementation. Areas of focus included allocations of time, training, and collaboration. Participants indicated 80% of students with disabilities lacked the academic and behavioral skills needed to master general education coursework. The results indicated teachers did not have enough time to implement EBPs learned in professional development.

Similar results were found in a more recent investigation. McGoey et al. (2014) examined the barriers teachers encountered when implementing evidence-based

behavioral interventions in the classroom. The use of a 24-question Likert-like survey measured the specific barriers to the implementation of EBPs. Sixty-seven educators identified lack of training, lack of resources, and lack of support from administration, comfort level with students with behavior problems, and efficacy of intervention that impacted the influence or the success of an intervention. Seventy percent of educators indicated a lack of time directly impeded the implementation of the intervention.

Behavior-Specific Praise

As noted by researchers, professional development or training is provided to mitigate academic and classroom management deficits (Brunsting, Sreckovic, & Lane, 2014). However, most educators are hesitant to adopt and implement an EBP that is deemed time intensive. As indicated in the studies by Santoli et al. (2008) and McGoey et al. (2014), educators cited lack of time as a barrier to EBP implementation. Research results indicate that teachers who do adopt behavioral EBPs will do so if they require little preparation and implementation time (Kalis et al., 2007). Though a limited number of practices have been formally identified as evidence-based for students with ED, one strategy that is quick and easy to implement is the use of BSP (Rathel et al., 2014; Sutherland & Wehby, 2001). Behavior-specific praise is defined as a verbal description of specified desired behavior for which a student is being praised; for example, *I like the way Jackie is sitting quietly in her chair* (Burke, Howard, Peterson, Peterson, & Allen, 2012).

The use of BSP statements can be highly effective for promoting positive outcomes for students with ED (Kennedy, Jolivette, & Ramsey, 2014). The use of BSP operating as a reinforcer may increase the probability that students with ED may engage

in an appropriate behavior or response (Wheatley et al., 2009). Moreover, positive and negative reinforcers vary from person to person. In fact, some students may not value praise or may even find it aversive (Fecser, 2015; Mueller & Dweck, 1998). While BSP may not be effective for all students, several studies have demonstrated the positive effects of BSP including increased student on-task behavior (Allday et al., 2012), improved academic performance in reading (Gable & Shores, 1980) and mathematics (Luiselli & Downing, 1980), and a reduction in disruptive classroom behavior (Mesa, Lewis-Palmer, & Reinke, 2005). In addition to redirecting problem behavior, praise is also a desirable intervention for teachers, as it is free and easy to implement while not requiring substantial amounts of time to employ.

The use of praise in the classroom setting is a simple, immediate, and non-intrusive strategy that can be easily used by all teachers across all grade levels (Landrum & Sweigart, 2014). The implementation of praise requires little time or additional materials. Teachers providing praise are able to use what is readily available to them at all times, a method of verbal or nonverbal communication (Jenkins, Floress, & Reinke, 2015).

Teacher Praise Rates

Although praise has been demonstrated to have a positive effect on students in both academic and behavioral areas, the actual use of praise in the classroom is minimal (Allday et al., 2012; Sutherland & Wehby, 2001; Sutherland et al., 2000). For example, an early study by Merrett and Wheldall (1992) found that students with ED were three times more likely to receive reprimands for problem behaviors than praise for appropriate behavior. However, despite the obvious reinforcing qualities BSP has on student

behavior, teachers in secondary classrooms are more likely to rely on punitive methods of behavior management, therefore, issuing praise infrequently, if at all (Sullivan & Sadeh, 2014).

Significance of the Study

General education teachers often feel underprepared to manage the diverse academic and behavioral needs of students with ED (Duchaine, Jolivette, & Fredrick, 2011). The challenging behaviors associated with students with ED often causes educators to struggle with classroom management (Adera & Bullock, 2010; Kindzierski, O'Dell, Marable, & Raimondi, 2013). In fact, it is not unusual for one child with problematic behaviors to change the entire classroom climate (Pisacreta, Tincani, Connell, & Axelrod, 2011). Educators often default to reprimands and punitive discipline practices (e.g., in-school and out-of-school suspensions) to remediate disruptive behaviors demonstrated in the classroom (Nocera et al., 2014).

Providing general education teachers with a readily available EBP to mitigate classroom management issues associated with students with ED off-task behaviors may be a feasible option. One such recommended strategy is BSP (Landrum & Sweigart, 2014). Behavior-specific praise involves minimal professional development to learn, little time to implement, and minimal teacher preparation (Brunsting et al., 2014; Landrum et al., 2003). The recommendation to use BSP is supported by long-standing research that demonstrates a positive relationship between teachers' use of BSP and students' appropriate and on-task behaviors (Gable, Hester, Rock, & Hughes, 2009).

There is considerable empirical evidence supporting BSP with students without disabilities in the general education classroom (Dufrene, Lestremay, & Zoder-Martell,

2014). However, few empirically based studies supporting the use of BSP with students with ED in the general education setting have been identified (Briere, Simonsen, Sugai, & Myers, 2015) and even fewer studies examine the use of BSPs with secondary students with ED in the general education setting.

Therefore, this investigation expands the current body of research by examining a model to support general education teachers' use of BSP with students with ED in the secondary classroom. Results from this investigation have the potential to benefit and improve the educational outcomes for students with ED.

Purpose of the Study

The purpose of the current study was to extend the research utilizing a within-school consultation model to impact the use of BSP by the general education academic teachers in secondary general education classrooms with students with ED. This investigation applied a multiple baseline single-subject design to measure the effects within-school consultants have on general education teachers' rate of BSP provided to students with ED in a general education setting.

Research Questions

In this study, the following research questions were addressed:

- Q1 Does the use of within-school consultants increase the rate of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in middle school general education academic classrooms?
- Q2 Does the use of within-school consultants maintain the use of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in the middle school general education academic classrooms after the intervention is terminated?
- Q3 Does the use of within-school consultants change the rate of general praise and reprimand statements used by teachers when providing instruction to

students with emotional disabilities (ED) in middle school general education academic classrooms?

Definition of Terms

Behavior-Specific Praise. Verbal description of specified desired behavior for which the student was being praised; for example, “I like the way Jackie is sitting quietly in her chair” (Burke et al., 2012).

External Consultant. Experts (e.g., researcher, researcher assistance, graduate students, etc.) to facilitate the consultation process (e.g., LaBrot, Pasqua, Dufrene, Brewer, & Goff, 2016; Scheeler, Congdon, & Stansbery, 2010).

General Praise. Verbal statements or physical gestures that indicate teacher approval for a student’s behavior and do not contain a specific description of behavior; for example, “Way to go!” or high five, thumbs up, or fist bump (Reinke, Lewis-Palmer, & Merrell, 2008).

Reprimands. Criticism or a verbal expression of disapproval by the teacher addressed to a student (e.g., “You are acting immature,” “Sit down right now,” and “I’m not going to tell you again to stop talking to Oscar”). Reprimands did not include feedback such as “You need to open your math book” (Merrett & Wheldall, 1992).

Within-School Consultant. A professional employed by the district or school who functions as a specialist (Briere et al., 2015; Hagermoser Sanetti, Fallon, & Collier-Meek, 2013).

Organization of the Manuscript

Chapter II provides a review of the relevant literature regarding the types of praise, rates of praise in the classroom, contrasting positions for the use of praise in the classroom, consultation methods, and performance feedback used to increase BSP rates in the classroom setting. Chapter III explains the procedures and methods that were used in this investigation. The final chapters discuss the findings and implications of the study. Chapter IV provides an analysis of the data and a discussion of the results. Chapter V includes discussion, conclusions, limitations, and recommendations for further research. This investigation concludes with the references and the appendices.

CHAPTER II

REVIEW OF LITERATURE

This review of literature begins with a brief history of special education. The review of the applicable literature provides a comprehensive overview that is categorized into four sections. The two types of praise most often used in the classroom are described in the first section. In the second section, the contrasting positions associated with the use of praise are discussed. Observed praise rates will be discussed in the third section, and in the last section, the methods used to increase praise rates including consultation methods and types of performance feedback are described.

Prior to the legislation mandating equal education opportunities, students with academic, cognitive, emotional, or physical disabilities had very few options (West, 2000). In the early 1970s, multiple landmark cases and court decisions shaped the direction for services provided to students with disabilities. The 1975 Enactment of All Handicapped Children Act (EAHCA) mandated that all students with disabilities eligible for special education services receive a free and appropriate public education (FAPE) in public schools across the United States (Baker, 2010).

In 1997, EAHCA underwent several revisions and evolved into the Individuals with Disabilities Education Act (IDEA), which emphasized the use of individual education programs (IEPs) for students with disabilities. The IDEA required schools to

provide special education and related services to students who meet the eligibility criteria for special education.

Later, as required by the 2004 revision of IDEA, students with disabilities were to participate to the maximum extent appropriate with students who were not disabled. As students with disabilities transitioned from a self-contained special education classroom setting to a general education setting, inclusion in core content areas became more prevalent, impacting the roles of general education classroom teachers (Peebles & Mendaglio, 2014).

Students with ED are often considered to be more challenging for educators to teach than students in any other subgroup of special education (Bradley et al., 2008). The characteristics associated with students with ED distinguishes them from other students with or without disabilities (Simpson et al., 2011). Students with ED often demonstrate behaviors that range in severity including anxiety, depression, non-compliance, and impaired social interactions (Bradshaw et al., 2008; Lane et al., 2007; Lane et al., 2013). Students with ED present behaviors that range in severity, requiring a broad continuum of interventions by school personnel to adequately address their needs (Benner, Kutash, Nelson, & Fisher, 2013). To mitigate the challenging behaviors often demonstrated by secondary students with ED in the classroom setting, many school professionals utilize a continuum of interventions.

General and Behavior- Specific Praise

Across decades, the operational definition of general praise has varied. For example, Farson (1963) identified praise as a statement that makes a positive evaluation of a person's behavior. A decade later, White (1975) described praise as a teacher

approval or encouragement. In 1981, Brophy defined praise as the ability to commend the worth of or to express approval or admiration. More recently, Kalis et al. (2007) operationalized praise as a verbal or physical behavior indicating the positive quality of a behavior over and above the evaluation of accuracy. Although there have been several variations in the definition of praise, the one constant throughout is the use of positive verbal or nonverbal attention or gesture that is directed toward a desired behavior or characteristic of the target (Jenkins et al., 2015).

Effectiveness of General Praise

Over decades, educators have used general praise as a common positive reinforcer in the classroom. However, research results of Stormont, Smith, and Lewis (2007) and of Hattie and Timperley (2007) indicated the use of general praise directed to students is more than likely to be unproductive for academic progress and overall growth. The examination of pre-correction and praise statements used in a Head Start classroom was the focus of Stormont et al. (2007). Participants included three teachers in a Head Start program. Results indicated that general praise statements were most popular with teachers and were most commonly used (77%) in the classroom. Since this type of praise is not linked to a specific behavior or targeting the successful completion of a task, it was not deemed effective. This suggests that teachers should use general praise less and utilize praise that concentrates on the identified specific behavior more in the classroom.

Similar to the Stormont et al. (2007) study, a meta-analysis conducted by Hattie and Timperley (2007) reviewed various forms of feedback as it relates to learning and teaching. Four separate types of classroom feedback were examined. Three of the four types of feedback (task, process, and self-regulation) were related to the instructional

level and the students' learning and skill development. The fourth type of feedback (self) involved providing feedback about the student as a person. For example, providing feedback that included "good girl" or "great effort" typically expressed positive evaluations and feelings about the student. This type of feedback contained little task-related information and was found to rarely transform into increased on-task behavior, increased commitment to academic goals, increased self-efficacy, or understanding about the task. These results coincide with the findings of many researchers (e.g., Brophy, 1981; Gable et al., 2009; Kalis et al., 2007), which have consistently reported that praise is not effective unless contingent upon a behavior or targeted task.

Behavior-Specific Praise

Decades of research have documented that praise is most likely to positively affect student behavior when it is directed to a specific behavior (Brophy, 1981; Sutherland et al., 2000). Compared to general praise definitions indicated above, BSP must incorporate these five essential components: (a) linking the praise statement to a specific behavior, (b) providing feedback, (c) being sincere, (d) reflecting student skill level, and (e) evaluating the effectiveness of the praise (Haydon & Musti-Rao, 2011). In addition to the five key components, BSP should also be provided immediately following the observed desired behavior (Willingham, 2005). Delaying the praise statement can diminish the effectiveness (Pisacreta et al., 2011). Overall, research results indicate that for praise to be effective, the praise statement must target a specific behavior.

Rates of Praise

The implementation of BSP requires minimal time or resources (Jenkins et al., 2015). The use of BSP has been demonstrated to have a positive impact on the academic

and behavioral outcomes for students (Dufrene et al., 2014). Additionally, BSP has also been associated with an increase in positive teacher and student relationships (Rathel et al., 2014).

General education. Although there is evidence substantiating the benefits of general praise, the optimal or average rate of praise or the ratio of BSP to behavior correction has not readily been suggested (Jenkins et al., 2015). As early as 1975, White (1975) found the rates of praise fluctuate as students progress through grades. Through the use of the Teacher Approval and Disapproval Observation Record (TADOR), observations occurred over eight studies with a total of 8,340 minutes. Participants included 104 teachers in Grades 1 through 12. Results indicated that in Grades 1 and 2, teacher statements of approval occurred more frequently than teacher statements of behavioral disapproval. However, statements of disapproval exceeded the rate of statements of approval every grade after Grades 1 and 2. Teachers in the elementary levels used statements of praise more frequently than behavioral disapproval statements compared to secondary teachers who used an increase of behavioral disapproval statements compared to praise statements. White found declining rates of praise in the classroom from 43.7 praises per hour in 1st grade to 8.4 praises per hour by 12th grade.

The review of six studies including four elementary (first through fifth grade), one seventh grade, and one eighth grade study, Brophy (1981) found similar results of inconsistent praise rates. Approximately 219 classrooms were observed for approximately 3,601 direct observation minutes. Data were collected regarding teachers' responses to academic performance and classroom misconduct. Findings indicated that elementary teachers praised academic performance an average of 5.2 times per hour and

appropriate class behavior an average of 0.1 times per hour. Seventh- and eighth-grade teachers praised academic performance an average of 2.1 times per hour and appropriate class behavior an average of 0.01 times per hour. Middle school teachers' rate of praise for appropriate behavior was the lowest, occurring approximately 0.01 times per hour. Although the rates of praise for specific grade levels were not described, results indicated that elementary teachers praise students more frequently for academics and appropriate class behavior compared to teachers in the middle-level grades.

A case study conducted by Burnett and Mandel (2010) examined praise rates in Australia. Four general education teachers and 56 students in Grades 1-6, ages 6-12 years were randomly selected. Although an operational definition of praise was not provided; the researchers provided examples of each type of praise. Praise frequency data were collected through direct classroom observations that occurred twice a week, totaling four weeks of observation. Observational hours totaled four hours of time per classroom, with an overall total of 16 hours of observation, thus, resulting in an average total rate of 29 general and BSP statements per hour and an average rate of BSP statements (i.e., positive feedback regarding ability and effort) of 1.75 times per hour. These results indicated educators are providing general praise statements to students on average of 50% of the instructional time compared to providing BSP 3% of the instructional time. The article did not specify the grade level taught by each of the four general education teachers; therefore, comparisons of general and BSP praise rates could not be made based on individual grade levels.

Similar results were found in a study by Reinke, Herman, and Stormont (2013). Researchers examined rates of general and BSP in 33 kindergarten through third-grade

classrooms in the urban area of the U.S. Midwest. General praise was operationally defined as “a verbal statement or gesture that specifies approval and does not name a specific behavior,” and BSP was defined as “any verbal statement or gesture that indicates approval and names a specific behavior” (Reinke et al., 2013, p. 40). Direct classroom observations ranged from 20-80 minutes. A total amount of time was not identified in the study. Results indicated that general praise was used 25.8 times per hour and specific praise 7.8 times per hour, indicating educators on the average utilized general praise three times more than BSP every hour. Compared to Burnett and Mandel (2010), Reinke et al. (2013) found kindergarten teachers provided BSP seven times more per hour than teachers in Grades 1-6. This comparison coincides with Brophy’s (1981) findings that praise rates decrease as students progress through grades.

In a recent study, Jenkins et al. (2015) examined the types and rates of teacher praise (e.g., behavior-specific and general) and praise delivery (e.g., individual, small-group, and large-group). Participants included four kindergarten teachers from one school located in the Midwest. A total of 44 classroom observations (14.8 hours) were conducted. Total frequency praise rates across the four kindergarten classes were 36.6 to 57.2 times per hour, with an average of 47.3 praises per hour. Results indicated that general praise intervention was used more frequently (38.5 praises per hour) compared to BSP (8.8 praises per hour). Regarding the rates of praise delivery, teachers praised individual students 24.7 praises per hour and large groups of students 21.6 praises per hour. The results of the Reinke et al. (2013) study and the Burnett and Mandel (2010) study averaged a rate of 26 to 27 praise statements per hour, compared to those of the Jenkins et al. (2015) study that demonstrated an increase of 38.5 praise statements per

hour. However, the use of BSP rates was very similar in the studies conducted by Jenkins et al. (2015), at 8.8 times per hour, vs. Reinke et al. (2013), at 7.8 per hour. The increased use of general praise statements was consistent with the previous findings of Reinke et al. (2013) and Burnett and Mandel (2010), thus indicating a pattern of general education teachers' preference of general praise to BSP.

Special education. Compared to studies examining praise rates with nondisabled students, results of studies examining praise rates for students receiving services for special education are considerably low (Hawkins & Heflin, 2011). For example, rates were lowest among students with a learning disability and/or behavior disorders, averaging approximately four approval statements per hour (Floress & Jenkins, 2015). Across decades, research literature substantiated that students with ED receive a higher ratio of reprimands to praise statements compared to other disability groups in the special education classroom setting (Rathel, Drasgow, & Christle, 2008).

As early as 1983, Gable, Hendrickson, Young, Shores, and Stowitschek found that educators used limited praise statements compared with the substantial criticisms used in classrooms serving students with ED. During direct observations of 97 teachers for a total of 970 minutes of instruction, students with ED received 4.4 praise statements per hour compared to students with intellectual disabilities (11.4 per hour) and multiple disabilities (13.5 per hour).

In a follow-up study, Shores et al. (1993) examined the social interaction between teachers and 19 students with ED who were deemed aggressive. Results indicated that teacher-student interactions were neutral. For example, when the teacher provided a student with direct instruction, the student complied. However, while the students

followed directions, the teachers seldom provided a positive consequence. Results indicated that praise statements as low as 2.4 per hour were provided to students with ED, even when the students were on-task and following directions.

The use of observation feedback to increase the use of BSP with students with ED was the focus of a study by Sutherland et al. (2000). A fifth-grade teacher and six students (two girls and four boys) ages 10-11 participated. Through the use of direct observation, the observer used a paper-pencil data sheet to record frequency count. During the first 15 minutes, the observer and secondary observer sat in the rear of the classroom and did not interact with the teacher, the teacher assistant, or students during the observation session. Observations occurred three times a week. An experimental ABAB (baseline, intervention, baseline, intervention) withdrawal design (Kazdin, 1982) was used to analyze the effects of the intervention on the teacher's BSP on the students' on-task behavior. Verbal feedback was provided. Results indicated the baseline mean of general praise was 3.3 per hour, with an increase to 3.7 during the intervention, and a decrease to 1.7 during the maintenance phase. The mean for BSP was 1.3 during baseline and 6.7 during the intervention phase and showed a similar decrease to 1.7 during the maintenance phase. However, during the reintroduction phase, the BSP rate increased to 7.8 indicating that without additional support or ongoing feedback, educators reverted to an increased rate of reprimands to praise.

Through the use of a multiple baseline design, Rathel et al. (2014) examined the ratio of positive-to-negative communications with students with ED. Four teachers in self-contained classrooms were observed four times a week for 15-minute observations for a total of eight weeks. During baseline, all four teachers averaged a 1:1 positive-to-

negative ratio at baseline. Two of the four teachers exceeded the criteria of 5:1 ratios of positive-to-negative communications during the intervention phase. The third teacher was able to meet the criteria with additional support during the reintroduction phase. The last teacher did not complete the study. Results indicated when the teachers' positive-to-negative ratios increased, the students' task engagement increased. When the teachers' positive-to-negative ratios decreased, the students' task engagement decreased. Overall, research indicates that the use of praise with students with ED has a positive effect on on-task engagement.

Reprimands. Although praise has been shown as an effective evidence-based classroom management strategy that promotes positive academic and behavioral outcomes, reactive strategies such as reprimands continue to be used in the classroom to address noncompliance. The use of reprimands compared to praise statements was the focus of a study by Ritz, Noltemeyer, Davis, and Green (2014). A mixed-methods research design utilizing classroom observations and teacher semi-structured interviews examined the behavior management strategies used to address preschoolers' noncompliance in the classroom. Observations were conducted in five classrooms across two schools. Participants included 13 to 16 students, ages 3 to 5 years. After observing 28 hours in five different classrooms, teachers issued a warning (27.3%) to address noncompliance across classrooms compared to the use of praise (11.4%). Although the use of proximity praise was indicated as one of the classroom strategies used with preschoolers, the praise statement was not behaviorally specific and demonstrated little benefit on behavioral change. Therefore, the continued use of a warning might not be as effective as providing BSP to aid teachers in strengthening their classroom management.

Examining a prepackaged social skills program to decrease reprimands and increase student on-task behaviors was the focus of a study by Utley and Obiakor (2015). Trained research assistants and doctoral students working at a research organization conducted direct classroom observations of seven teachers serving Grades K-5. The observers monitored the use of Cool Tools, a social skills program. Results indicated that a pre-average praise-to-reprimands ratio was 0.9 to 1 and post average was 1.2 to 1. As grade levels increased, praise rates decreased with each consecutive grade: K (8 to 1), first (1.5 to 1), second (2.1 to 1), and third (0.24 to 1).

While these results indicated that the Cool Tools social skills program did not significantly change the praise rate for teachers K-5, the baseline scores supported the early findings that praise rates are higher K-first grade and decline during second grade. Even though a prepackaged social skills program was implemented, praise rates for each grade level showed a decrease, except in second grade with a minimal increase, and reprimands remained the same.

The class-wide function-related intervention team (CW-FIT) program is designed to teach students appropriate classroom behavior using group contingencies in the form of a game. Increasing teacher praise and reducing teacher reprimands through the use of the CW-FIT in a self-contained classroom with students with ED was the focus of a study by Weeden et al. (2016). Participants included an entire six-member class of elementary school children (five boys, one girl) between the ages of 6-9. Training procedures included an overview and rationale for intervention, video models, review of fidelity, and practice with feedback. Results indicated that the teachers' BSP increased from 3.6 to 40.1. Reprimands decreased from 9 to 3.9. Although the CW-FIT intervention

demonstrated an increase in BSP and a decrease in reprimands, the study did not indicate maintenance or generalization effects.

Although there is research evidence that BSP is an effective proactive strategy to promote positive classroom behaviors, educators will default to the use of reprimands over praise to encourage students. This reactive style of classroom management is discouraging (Kalis et al., 2007). The continued use of negative statements such as reprimands contributes to a negative school experience (Skinner, 1976) and, therefore, may contribute to absenteeism or dropout rates often associated with students with ED (Kalis et al., 2007).

There is an ongoing debate regarding the detriments and benefits of the use of praise in the classroom. Arguments surrounding the detrimental effects of praise include the use of praise to acknowledge a student's ability and intelligence (Droe, 2013; Mueller & Dweck, 1998).

Acknowledging Detriments of Praise

Parents and teachers use praise as a common reinforcer to increase feelings of competence and self-determination (Mueller & Dweck, 1998; Weaver, Yager, Cashwell, Hinds, & Fascio, 2003). However, based on a small body of evidence in the literature, many educational professionals, scholars, and researchers hold the belief that praise for certain situations (e.g., intelligence and ability) may be detrimental to students and students' performance in the classroom (Droe, 2013; Weaver et al., 2003).

While there is a limited research base indicating praise is detrimental to students, other researchers examining the effects of praise refute these claims, citing evidence-

based research supporting positive effects of praise on students' academics and behaviors in the classroom (Maggin, Wehby, Partin, Robertson, & Oliver, 2011).

Duchaine et al. (2011) examined the effects of BSP during instruction and the impact of on-task behaviors in math class. Participants included three high school math teachers who taught in an alternative class. Consultants directly observed each math teacher's rate of BSP for 15 minutes at the same time each day the class met. The consultants provided written feedback after each observation. Results indicated that all three teachers demonstrated an increase in the use of BSP when provided written feedback. Results also indicated that teachers who maintained an increase of BSP in the classroom continued to have students with low disruptive behaviors.

Methods Used to Increase Behavior-Specific Praise Rates

Increasing praise to alter the classroom environment inevitably involves changes in the classroom teacher's behavior (Partin, Robertson, Maggin, Oliver, & Wehby, 2009). Results from classroom-based intervention research show the effectiveness of consultation models that incorporate continued performance feedback increases teachers' rates of praise (Kalis et al., 2007; Reinke, Lewis-Palmer, & Martin, 2007; Sutherland et al., 2000; Sutherland & Wehby, 2001).

Consultation

Research emphasis has shifted from solely demonstrating BSP effectiveness to training teachers to increase the frequency of BSP used in the classroom (Allday et al., 2012). To increase the use of BSP in the classroom, the use of consultation models has been encouraged. Specifically, the process of consultation involves a person with specialized knowledge in a particular area working directly with a classroom teacher

toward changing current teaching or classroom management practices (Denton & Hasbrouck, 2009). When consulting with teachers, the consultation process prompts external (researchers/experts) or internal (e.g., a person employed by the school district) consultants to provide real-time or deferred performance feedback (e.g., Burke, Oats, Ringle, Fichtner, & DelGaudio, 2011; LaBrot et al., 2016; Reinke et al., 2007; Scheeler et al., 2010).

External Consultation Model

To increase the use of BSP in an educational setting, school officials can elicit the expertise of an external consultant. External consultation often uses an expert (e.g., researcher, researcher assistance, graduate students, etc.) to facilitate the consultation process (e.g., LaBrot et al., 2016; Scheeler et al., 2010).

A noncurrent multiple baseline design across participants was used to examine the effectiveness of various teaching procedures via a direct consultant (Dufrene et al., 2012). The external consultants provided training including scripts, practice, feedback, handouts, and immediate feedback via a personal FM device to four Head Start teachers. Through the direct consultation, Head Start teachers increased their rate of BSP, while students' disruptive behavior decreased. Following the intervention phase, three out of four teachers maintained an increased rate of praise. Moreover, when one teacher failed to maintain an increased rate of BSP, students responded with increased disruptive behavior. In those cases, the teacher was provided with additional training combined with performance feedback. Although three out of four Head Start teachers increased their praise rate with an external consultant providing direct consultation, the results were mixed since one participant required additional support.

More recently, Dufrene et al. (2014) utilized an external consultant (i.e., researcher) to provide direct observation to increase the use of BSP in the classroom setting. Participants included two teachers in an alternative elementary school for students with ED. Students were chosen due to longstanding substantially disruptive or dangerous behavior exhibited in their home school. Through direct observation, the external consultant (i.e., researcher) prompted the teacher to provide one BSP statement to the student who met classroom expectations. Participants were provided a handout during one-one teacher training.

The external consultant provided real-time prompts to the teacher via a two-way radio each minute to ensure accurate implementation of BSP. The teacher was expected to repeat the prompt verbatim. Although the purpose of the study was to add to the literature, results were mixed since neither teacher maintained an increased rate of BSP. At baseline, Teacher 1's praise rate ranged from 0 to 0.35 praise statements per minute and students engaged in 3.35 classroom disruptions per minute. The rate of praise for Teacher 2 ranged from 0.5 to 0.25. Student disruptive behaviors ranged from 0.6 to 3.2.

During the intervention phase, Teacher 1 increased BSP statements to an average of 0.94 per minute, with a decrease of classroom disruptions to 1.6 per minute. Teacher 2's praise increased to an average of 1.30 per minute, and student disruptions decreased to an average of 0.53 per minute. However, once the direct consultation was terminated, the teachers' rates of BSP decreased and students' disruptive behaviors increased.

These mixed results are similar to an earlier study by Dufrene et al. (2012). Participants in both studies (Dufrene et al., 2012; Dufrene et al., 2014) increased BSP rates while receiving direct consultation via an external consultant. However, once the

external consultant completed the intervention, 50% of the participants failed to maintain an increased rate of BSP and students' disruptive behavior increased. While the use of direct behavior consulting provided by an external consultant (researcher) showed an increase in BSP during the intervention phase, the use of BSP by the teachers decreased without ongoing support.

Although external consultants (e.g., researchers, graduate students, etc.) provide expertise, they clearly cannot provide ongoing internal support to teachers. As noted by Dufrene et al. (2012), the teacher who did maintain an increased rate of BSP during the maintenance phase was able to do so with additional support and performance feedback. While these results demonstrated positive effects (an increase in praise rate), the resources available to secure ongoing contact with external consultants pose a concern for the maintenance of this form of intervention.

Barriers to External Consultants

Although there is an evidence base substantiating the effectiveness of an external consultation as a method to increase BSP, research indicated implementation barriers associated with this method. Challenges such as school culture and the professional communication between teachers and external consultants may contribute to implementation difficulties and inconsistent implementation (McGoey et al., 2014).

For example, teachers indicated that external consultation members tend to devalue or not consider teachers' perspectives as important (Slonski-Fowler & Truscott, 2004). Participants in this study included 12 general education teachers in Grades K-4. Results from initial interviews, pre-referral intervention team observations, classroom observations and post-observation interviews, and additional field notes indicated that

teachers disengaged from the external consultation process at three critical points when consultants: (a) devalue or ignore teachers' input in the problem-solving process; (b) respond to referrals with limited, vague, or irrelevant interventions; or (c) exhibit little accountability or implementation follow-up after meetings. This finding supports the work by Spratt, Shucksmith, Philip, and Watson (2006). Joshi's (2004) earlier findings indicated that an external consultant does not understand the school culture and the consultees' situation which counteracts an effective consultation model.

A meta-analysis by Spratt et al. (2006) found that teachers prefer learning from other teachers. The interactions between different professional groups in the school setting were examined in relation to the support of the emotional well-being of children and young people. Results indicated that teachers found benefit to having a professional (e.g., school social worker) in the building to assist the staff with challenging behaviors. Teachers also indicated that they question the validity of training from individuals without direct experience in classroom management or specific expertise about the mental health of children. Teachers would rather approach another teacher when having a specific behavior concern with a child. Additionally, findings showed that teachers preferred to learn from other teachers and wanted professional development delivered by someone familiar with existing field experience.

Similar results were found in a qualitative study conducted in Sweden. Thornberg (2014) investigated the perceptions and cultural barriers to the use of an external resource team of consultants. Participants included a team of consultants, elementary school educators, parents, and the students identified as difficult-to-teach. Through the use of grounded theory, interviews with students and parents, focus groups with teachers,

principals, and the resource team, one overarching barrier of professional boundaries was revealed to directly impact a positive consultation experience between teachers and non-teachers (external consultants).

Professional boundaries were identified as the differences between the beliefs of the schools and external consultants. For example, teachers were opposed to the inclusion of a student who demonstrated challenging behaviors in the school setting. External consultants, on the other hand, were in favor of the inclusion of the same student.

Another area of contention included the approach regarding discipline styles. Consultants considered teachers to be too authoritarian and consultants were seen as too permissive and as not setting clear limits. Overall, many teachers reported the resource team consisting of consultants did not understand the school culture and their situation as teachers. These findings align with Spratt et al. (2006), indicating that teachers felt their perspectives were devalued.

For the consultation process to be effective, the consultant needs to understand the requirements and experiences of the consultee as well as possible. However, teachers view the external consultants as intruders with an outside agenda and not focused on the consultee-consultant relationship.

Within-school Consultation Model

In order for the consultation process to be effective, the consultation approach should fit within the existing school culture and involve ongoing support to nurture meaningful changes in staff behavior (Thompson, Marchant, Anderson, Prater, & Gibb, 2012). An internal consultant is a professional employed by the district or school and functions as a specialist (Briere et al., 2015; Hagermoser Sanetti et al., 2013). An internal

consultant typically focuses on an individual teacher's academic or classroom management deficits (Briere et al., 2015) and focuses on a small number of students, rather than altering the entire classroom system (Hagermoser Sanetti et al., 2013).

For example, Briere et al. (2015) examined the effects of a within-school internal consultative approach on new teachers' specific praise statements during teacher-directed instruction. A total of eight new teachers creating teacher/mentor teacher dyads participated in the study. Each new teacher identified a 15-minute segment of the teacher-directed instruction period to be the focus of self-monitoring and data collection. Baseline was determined by the teacher's use of praise at or below six statements in a 15-minute period. All teachers demonstrated low baseline levels of specific praise ranging from 0.0 to 0.4 BSP statements per minute. During the intervention phase, each teacher self-monitored and recorded the frequency of specific praise and met with the mentor weekly. The baseline data were graphed on a template. Once the within-school consultation model was introduced in the intervention phase, all teachers involved in the study demonstrated an increase in BSP with a range of 1.3 to 2.5 statements per minute. During the follow-up condition, all teachers sustained the use of BSP, with an average of 1.8 praise statements per period demonstrating that the use of internal consultation (a school or district staff member) is capable of providing intervention that increases and maintains the use of BSP in the classroom.

Additionally, Hagermoser Sanetti et al. (2013) conducted a multiple baseline across-teachers study and found that providing an internal consultant that provides graphic feedback along with verbal feedback was more effective than delivering verbal feedback alone. Graphic feedback is simply the charting of data for performance

feedback. Participants included 181 eighth grade students, eight teachers, and two school-based internal consultants from a suburban middle school (Grades 6-8). The eight core content area teachers were divided into two teams. Each day, students had four opportunities to participate while they were in their content classes (e.g., math, science, social studies, and language arts). Three goals were established by the researcher and teachers: (a) academic engagement (writing or raising hand), (b) preparedness (being seated, having pencil), and (c) respect (following teacher's directions). Students who were taught to self-monitor completed a daily self-monitoring form (DSM) at the end of each class. Researchers collected the permanent products and audiotapes once a week after the internal consultant completed the review of teacher treatment integrity. Results indicated that internal consultants are able to assess and briefly increase teachers' treatment integrity with performance feedback. Based on the positive findings from Briere et al. (2015) and Hagermoser Sanetti et al. (2013), the use of a within-school consultation model demonstrated maintained increases in the use of BSP and an increase of treatment integrity with teachers.

Teacher Performance Feedback

In both external and within-school consultation models, the consultant delivers feedback to the consultee (teacher). As defined in literature, performance feedback procedures typically consists of a consultant: (a) meeting with the teacher for a brief period to provide knowledge (e.g., 5–10 minutes); (b) increasing awareness by presenting data verbally, graphically, or in a written form; (c) identifying, discussing, or reinforcing the specific intervention steps correctly implemented; (d) correcting undesirable behavior steps that need readdressing; and (e) promoting transfer and maintenance of skills

(Duchaine et al., 2011). Decades of research literature indicate that in order for performance feedback to be effective, it must be provided when intervention integrity drops to a specified level (e.g., Briere et al., 2015; Scheeler et al., 2010). The delivery of performance feedback is categorized into two methods, immediate/real-time or deferred.

Immediate/Real-time Performance Feedback

Immediate or real-time performance feedback occurs as soon as the observer notices a teaching practice or behavior that is worth mentioning or needs correction. The consultant provides performance feedback in real time which allows the teacher to immediately change the teaching practice (Scheeler et al., 2010). Although researchers have used various forms of technology to provide immediate feedback (e.g., wireless earphone, a mechanical third ear device, or an electronic audio-cueing system), the Bug-in-Ear (BIE) is the most widely used device (e.g., LaBrot et al., 2016; Rock et al., 2009). Immediate performance feedback is provided to the teacher through various forms, either by immediately stopping classroom instruction or giving the teacher feedback via a personal FM device such as the Bug-in- Ear (BIE) technology.

Bug-in-Ear

Encouraging three co-teacher teams to provide immediate positive feedback to increase students' opportunities to respond was the focus of Scheeler et al. (2010). Feedback with praise was provided for a correct answer or error correction for an incorrect answer. Co-teachers used a personal FM device to deliver teacher feedback to each other. Although the intervention increased positive feedback from baseline 13.9 to 21.5 at intervention, the immediate feedback system provided several limitations to the co-teachers. Student data were not collected to evaluate if the BIE co-peer coaching

model was effective. Although all three teachers increased positive statements to students, teachers learning the intervention had a difficult time simultaneously coaching and providing feedback to each other.

LaBrot et al. (2016) utilized a multiple baseline design across-teachers study to examine an in-situ or immediate training procedure for increasing a Head Start teacher's praise rate in a before- and after-school program. Participants included four Head Start teachers. The study included the following phases: (a) baseline, (b) in situ training, (c) maintenance, and, (d) follow-up. A one-way FM radio BIE was utilized to provide real-time, in-situ verbal prompts to teachers. The system allowed the consultant to provide unobtrusive prompting. Praise was recorded using an event recording procedure.

Observers included a doctoral student in school psychology and an undergraduate student in psychology. Baseline data ranged from 0 to 3.0 praise statements per minute, in situ treatment phase data ranged from 1.6 to 6.1 praise statements per minute, and maintenance phase data ranged from 0 to 3.3 praise statements per minute. The rate of praise remained above the designated criterion of one praise statement per minute.

During the one-month study, follow-up rates remained above the one praise statement per minute criterion (0 to 3.0 praise statements per minute). Three of the four teachers increased their praise rate and found the intervention effective. However, the fourth teacher required additional one-on-one consultation to increase her praise rate to one praise statement per minute. All four teachers demonstrated an increase in praise utilizing BIE technology; however, student data were not included in the study making it unclear if student disruptions were positively impacted.

Examining the effects of an enhanced BIE technology on the increase of praise and the decrease of reprimands was the focus of a study by Rock et al. (2009). A mixed methods study was used to evaluate the effectiveness of incorporating mobile devices and the internet to improve the use of traditional BIE immediate feedback on teachers' use of research-based practices. Participants included 15 teachers enrolled in a graduate special education teacher preparation program. During the observation, the researcher provided immediate feedback to increase the participants' use of research-based teaching practices. An enhanced system incorporating internet technology and four additional components (e.g., webcam, Bluetooth, Bluetooth headset, and Skype) was used. Data collection included video-recorded teacher observations, written reflections by teachers, and teachers' experiences using BIE. Student engagement and disengagement was analyzed through the use of a momentary time-sampling method at 5-minute intervals during 30-minute time periods.

Results indicated that the advanced BIE technology was a practical and efficient way to provide immediate feedback with minimal classroom distractions. Eighty percent of participants believed that the use of BIE is a powerful tool for improving student engagement. Research indicated that the use of immediate feedback is beneficial to increasing BSP in the classroom. However, real-time verbatim classroom feedback can be time intensive and may not be feasible for all schools (Labrot et al., 2016). Schools with limited consultant resources may opt for a less-intensive approach such as self-management or weekly feedback sessions to improve a teacher's use of BSP.

Deferred Feedback

Compared to immediate feedback, deferred feedback provides the teacher feedback after the completion of the lesson. The feedback session can occur anywhere from immediately after the lesson to a few days later. Scheeler et al. (2010) described deferred feedback as a process that employs a classroom observer to document a targeted behavior via quantitative data such as a frequency chart. The data are compiled and presented to the teacher. The benefits of deferred feedback include: (a) the observer sits quietly, (b) the observer is unobtrusive during the lesson, (c) the observer does not interrupt the flow of instruction, and (d) the student maintains attention to the task or the teacher. As indicated in the literature, deferred feedback can assume various forms such as visual (e.g., graphs charts) and written (e.g., email).

Visual Performance Feedback

Reinke et al. (2007) examined the effects of visual performance feedback (VPF) in the form of a graph to increase the use of BSP. Three elementary school teachers in general education classrooms participated in the VPF intervention. To be considered for the study, each teacher must have provided BSP inconsistently and minimally even after each teacher participated in a brief group meeting that focused on increasing their use of BSP. The VPF intervention consisted of graphing the frequency of BSP used by the teachers. Each teacher was provided a graph and was not provided with verbal feedback. Results indicated this form of VPF was found to increase their rates of BSP. Analysis of follow-up data revealed that the increased use of BSP during the VPF phase was not maintained once VPF was removed.

A multiple baseline with reversal design study by Burke et al. (2012) examined whether VPF influenced teachers' and their classroom aides' use of BSP in a day treatment program. Participants included two classroom teachers and two classroom aides from two separate classrooms in a day treatment program serving students 2 to 8 years old diagnosed with mental health issues. The researchers collected baseline data from all participants.

Once the baseline was collected, each teacher replaced the researcher and continued to collect BSP frequency data on their classroom aides during the intervention phase. The BSP frequency data were plotted on a graph and provided to the classroom aides. No discussion of the graph was provided at this time. Each classroom aide viewed the graph and returned it to the researcher. During the reversal phase, data collection and instruction continued, but the graph of the results was not provided to the aides. The second intervention phase mirrored the first, consisting of data collection and a graph shared with an aide. Both aides showed a decreasing or variable rate of BSP during the second intervention phase.

During the intervention, the mean rates ranged from 7.3 to 20.0 statements per 10-minute interval for the first classroom aide and from 13.1 to 23.9 statements per 10-minute interval for the second classroom aide. During maintenance, one-week post-intervention, both aides demonstrated an increase in BSP rates of 24.0 and 27.5. The teachers who collected the data were also observed by the researcher, and frequency data were collected on their rates of BSP. Each teacher's results were similar to the those of the aides. Teachers increased their BSP rate by 58% (18.7 to 29.5) and 120% (13.6 to 29.9) per 10-minute observation. Results from this study indicated that visual feedback

without verbal feedback is an effective intervention to increase BSP for a student with behavior disorders in an alternative program.

Additionally, Reinke et al. (2008) conducted a multiple baseline study across subjects to examine the effects of a classroom check-up program and the use of visual feedback (graph) to increase BSP rates. The five steps included access to: (a) a classroom, (b) feedback, (c) a menu of options, (d) a choice of interventions, and (e) teachers' self-monitoring of treatment integrity.

Four general education teachers (first, second, and fifth grades) were observed during a 10-minute math instruction. Data were collected by trained observers who were unaware of the intervention or research questions.

The observers collected frequency counts on BSP, general praise statements, reprimands, and disruptions. During a 10-minute direct observation, a frequency count of student disruptions and teacher BSP rate was collected and a graph charting the data were provided to participants. Mean rates of BSP increased with the classroom check-up and self-monitoring, but increased more with the classroom check-up and visual feedback.

Results indicated that the first teacher provided BSP 10% of the time and general praise 90% of the time at baseline. During the intervention phase, the first teacher increased the BSP rate to 58% and decreased general praise to 42%. At follow-up, the first teacher provided BSP 70% of the time and general praise 30% of the time. The second teacher provided 40% of BSP and 60% of general praise statements at baseline; during the intervention phase, Tina increased BSP to 62% and general praise to 48%. During follow-up, teacher 2's BSP increased to 71% and general praise decreased to

39%. Teacher 3 provided BSP 22% and general praise 78% during baseline. At intervention, Teacher 3 increased BSP to 68% and general praise to 42%.

During follow-up, teacher 3 provided 68% BSP, and her general praise decreased to 32%. At baseline, Teacher 4 provided 80% BSP and 20% general praise. During the intervention, Teacher 4's rates of BSP increased to 98% and decreased to 2% of general praise. At follow-up, Teacher 4 provided 100% BSP. Disruptions decreased in two of the classrooms, while the other two classrooms were inconsistent. One month after the final intervention, maintenance observations demonstrated that increased rates of praise and decreased disruptions continued across all four classrooms, with four teachers indicating that VPF was an effective intervention to increase BSP with four teachers, thus causing a decrease in classroom disruptions.

The use of VPF and modeling to increase praise was the focus of a study by Pisacreta et al. (2011). Three teachers identifying high rates of disruptive behaviors in the classroom participated in the study. A multiple baseline across participants was used to assess the relationship between teacher behavior, student behavior, and training teachers to implement a 1-to-1 praise-to-behavior correction. Baseline results showed low ratios of praise-to-behavior correction for all three participants: (a) Teacher 1 (0.1 to 1), (b) Teacher 2 (0 to 1), and (c) Teacher 3 (0.5 to 1).

With modeling and performance feedback, each teacher demonstrated an increase in praise rates. Teachers 1, 2, and 3 demonstrated average ratios of 1.9 to 1. Student disruptive behaviors ranged from 22% to 40%. With modeling and performance feedback, disruptive behaviors decreased in Classrooms 1, 2, and 3. Students demonstrated only 23% disruptions. Despite the recommendation of 4-to-1 praise-to-

behavior correction ratio (Myers, Simonsen, & Sugai, 2011), the results of this study indicated that lower ratios such as 1-to-1 praise-to-behavior correction ratio will decrease student disruptive behaviors.

Email Feedback

Studies have shown verbal feedback to take up to 12 minutes (Coddington, Feinberg, Dunn, & Pace, 2005; Coddington, Livanis, Pace, & Vaca, 2008), whereas other approaches, such as a hybrid form of performance feedback, via email, takes less time. Providing ongoing support and feedback via email to increase the use of BSP with students with ED was the focus of a modified concurrent baseline design by Allday et al. (2012).

Participants in the Allday and colleagues (2012) study included one dyad comprised of one teacher paired with one student and three triads comprised of one teacher paired with two students. Three student participants were identified with ED, and four were at risk for ED. Student data were coded during classroom observations. Teacher data were coded using frequency counts by listening to voice recordings.

Teacher feedback was provided every three days via email, which included performance, goal achievement or underachievement, and target student task engagement data. The second-grade teacher increased praise rates by 186% and general praise by 34%. The use of correction statements decreased by 43%. The kindergarten teacher's BSP rates increased by 59%. However, corrections statements increased (0.96) per minute. The two kindergarten students' on-task behavior increased 19% and 25%. The first-grade teacher increased BSP rates by 303%, decreased the rate of correction by 31%, and almost achieved a 2-to-1 BSP correction rate. First-grade students increased on-task behaviors by 3%. The second-grade teacher increased the BSP rate by 186%, and

students increased on-task behaviors by 25%. Sixth-grade teachers increased their BSP rate by 642%, the largest overall gain. Students increased on-task behaviors by 18% and 7%.

Rates of BSP increased for all participating teachers. Three of the four teachers replaced general praise statements with BSP statements. Although all participants increased the use of BSP and students increased on-task behavior during the intervention, the study did not evaluate praise rates and student on-task behaviors once the intervention was completed.

Summary of Feedback

Research findings support immediate and deferred forms of performance feedback as being effective in increasing teachers' BSP rates in the classroom--the most common being BIE, visual feedback, email, and self-monitoring. While research indicated positive results with immediate and deferred feedback, most forms of feedback are resource-intensive and, therefore, may not be feasible for consistent use in the school settings (Solomon, Klein, & Politylo, 2012). In addition, numerous factors, including time, resources, and preferences of teachers and consultants, contribute to the modality that will be most beneficial to the teacher, school, or district (Scheeler et al., 2010). Moreover, immediate and deferred feedback often incorporates expensive programs or technological approaches which directly impacts the level and consistency of implementation.

Summary

For decades, educators have used praise as a strategy for positive reinforcement. However, research indicated that educators prefer the use of general praise statements

over the use of BSP statements in the classroom. General praise statements such as “good girl” are typically used to express a positive evaluation of the student and do not relate to specific-task or behavior-related information. Research results demonstrated that praise statements must be directed to a specific behavior in order be effective.

Although there is substantial evidence supporting the benefits of praise, there are continued inconsistencies regarding the optimum rates of praise for general and special education students at elementary and secondary levels. Research evidence suggests that praise rates decline as students progress from kindergarten through the elementary grades, and the use of reprimands increase as students enter the secondary level.

Consistently found throughout the research was that students with disabilities (more so, students with ED) continue to receive praise statements in the classroom at the lowest rates. As evidenced in research, teachers of students with ED were found to provide increased use of criticisms and reprimands to mitigate problematic behaviors often demonstrated in the classroom.

Using external and internal consultants was found to be an effective method to increase BSP rates in the classroom. However, research examining the external consultation model found implementation barriers such as teachers feeling devalued and external consultants not having a connection to the school or students. Research literature also showed that once the external consultant stopped providing support, teachers did not continue or maintain intervention integrity. Compared to the external consultation model, a within-school consultation model demonstrated a maintained increase in the use of BSP and an increase of treatment integrity with teachers. Research evidence found that if teachers were given a choice, teachers would rather learn from another teacher.

Consultation models that include immediate or deferred performance feedback were also found to be effective in increasing the use of BSP in the classroom. Immediate feedback, such as BIE, demonstrated an increase in BSP; however, technological challenges may occur (e.g., teachers not being able to hear the coach or difficulty with the internet). Deferred feedback, such as visual (graph) and emails, were found to be effective means to increase BSP. This form of intervention was found to be more practical and accessible to schools with minimal resources.

CHAPTER III

METHODOLOGY

In Chapter III, the research design is delineated. The purpose of the study and an overview of the study will be discussed. This chapter also includes sampling, measures, procedures for the data collection, and a plan for data analysis. This study utilized a multiple baseline across participants design (Richards, Taylor, & Ramasamy, 2014) to examine the effects of a within-school consultation intervention and middle school general education teachers' rates of BSP used with a student with ED during content area classroom instructional time.

Theoretical Framework

The theoretical underpinnings for this study were developed within a behaviorist framework. This framework embraces theories found in the field of behavioral psychology. Through the use of experimental research methods utilizing observable and measurable behaviors, behaviorism has secured a place in the field of science (Peel, 2005).

Behaviorism is a theory that perceives human nature through observable and measurable behaviors. These can be predicted, explained, and controlled by utilizing behavior techniques (Schunk, 2012). Behaviorism, first defined by Watson in 1913, was described as a study of observable behaviors (Malone & García-Penagos, 2014). Through the use of observable psychological experiments, Watson stressed that the results from

the experiments should be applicable to education and daily life. Building on Watson's beliefs, Thorndike argued that the observed changes in behavior are responses to stimuli and are strengthened when followed by consequences such as positive reinforcement (Darity, 2008). Thorndike also contended that the role of practice assists in establishing connections or associations between stimuli and observed responses (Schunk, 2012).

The theories of Watson and Thorndike as well as B.F. Skinner (1976) stated that stimuli must be: (a) objective and measurable, (b) able to be modified through explicit interventions, and (c) explained through environmental context such as situations, and/or events (Skinner, 1976). Skinner's theory of radical behaviorism contends that contingency techniques that incorporate (a) stimulus (antecedent), (b) response (behavior), (c) and reinforcing stimulus (consequence) behavior can be changed. For example, rewards or praise such as BSP can be categorized as positive reinforcers.

Therefore, it can be posited that reinforcing consequences, such as praise, will increase the likelihood of the desired behavior, and consequences that are negative or punishing will decrease undesirable behaviors within a student's classroom experience. However, educators that continue to use unpleasant stimuli in the form of negative consequences may increase the probability of a student's overall negative school experience and negatively impact student-teacher interactions (Schunk, 2012).

According to Kalis et al. (2007), secondary students with ED routinely receive a higher ratio of negative reinforcement statements compared to praise statements. Therefore, students with ED may sporadically attend, become non-attenders, or drop out of school due to continuous negative experiences during the school day (Wilkerson, Gagnon, Melekoglu, & Cakiroglu, 2012; Zablocki & Krezmien, 2013). Following the

principles of behaviorism, the American Psychological Association (Dwyer, Dweck, & Carlson-Jaquez, 2012) recommended that teachers and educational professionals (a) notice students' good efforts and praise them, (b) be specific about the praised behaviors and reinforce the behaviors with feedback, and (c) use praise to link the desired outcomes to student efforts. The need to increase the use of positive consequences such as BSP in the secondary classroom may contribute to on-task behaviors, therefore, creating positive learning experiences for students with ED and, in turn, enhance positive school outcomes.

Research Overview

The implementation of a within-schools consultation intervention to increase general education use of BSP provided to students with ED was the focus of this study. General education academic teachers were systematically trained in the within-schools consultation intervention. Trainings and implementation were staggered across three teacher pairs. A multiple baseline across participants was used to examine whether the use of a within-schools consultation intervention impacted the use of BSP provided to students with ED. The methods used to address the research questions is summarized in this chapter. A review of research is found in Figure 1.

Single-Subject Multiple Baseline Across Subjects Design
Train observers to collect general praise, BSP, and reprimand data used with students with ED in their classroom.
Observers start data collection on teacher praise rates. Use frequency recording
Baseline phase: (no intervention provided at this time) Minimum of five data points collected for teachers (5) during a two 15-minute observation that occur during a 90-minute block schedule.
Baseline Feedback: After teachers have received initial training in the consultation intervention. Teachers received baseline data feedback.
Intervention phase: Observers collect data. Researcher met with teachers after every two observations 20-data points. Data were collected twice (two 15-minute observations) during each 90-minute block schedule.
Intervention Feedback: After every two observations, the teacher participants met with the researcher to receive visual feedback of BSP, general praise statements, and reprimand use in the classroom. The 15-minute scheduled feedback session occurred within 24-hours after the completion of every two observations.
Monitor treatment fidelity through review of audio tapes and checklists of consulting sessions
Follow-up: occurred for 2-weeks
Social Validity: Each observer and teacher completed a social validity survey

Figure 1. Research overview.

Setting

This current study was conducted in a suburban middle school serving Grades 6-8 in the western United States. The estimated enrollment was approximately 800 students, with an estimated 84% eligible for free or reduced lunch. The population of the school was approximately 3% African American, 26% Caucasian, 6% Asian, and 65% Hispanic. An estimated 14% of students were eligible for special education services.

Approximately 40 certified teachers were employed at the school. The targeted classrooms for the study included three general education academic classrooms which served students with ED. The typical class size was 35 students. The middle school functioned on a block schedule. Each student had one 90-minute content area class in the morning before lunch and one 90-minute content area class after lunch. The classes

rotated between days. The alternating days were coded green or gray. For instance, a student may have math and science on a green day and language arts and social studies on a gray day.

Participants

Teacher. Teacher participants included three middle school general education academic content (two science and one social studies) teachers (Grades 6-7). Each academic teacher participant had a student or students with ED in their classroom (see Table 1). The mean level of years teaching was 7.5, and the range was 5 to 13 years.

Table 1

Teacher Demographics

Teacher	Education Level	Years Teaching	Area Certified	Grade Taught	Class Size
Kelly	Bachelor's degree	5	Science	6	32
Tina	Bachelor's degree	5	Social Studies	6	35
Katie	Master's degree	13	Science	7	33

Observer. Four observers participated in this study. The observers directly observed teachers and recorded data. Criteria for observers included being: (a) employed at the target school, and (b) a certified employee at the school (e.g., teacher, psychologist, and supervisor) or classified employee (paraprofessional). All observers were employed in the middle school in which the study was conducted. Observer demographics are outlined in Table 2.

Table 2

Observer Demographics

Observer	Education Level	Years Employed
Primary Observer 1	Associates degree	4
Primary Observer 2	Associates degree	2
Primary Observer 3	Bachelor's degree	2
Secondary Observer 4	Associates degree	19

The first observer held an associates degree and was employed as a paraprofessional in the middle school. She had four years of experience in a self-contained classroom for students with ED. For the previous three years, she supported students receiving special education in the general education academic classrooms.

The second observer also worked in the middle school. He held an associates degree and began his role as a paraprofessional two years ago. He supported students with ED in the general education setting.

A certified special education teacher was the third primary observer. She had been employed for two years in the middle school in a self-contained classroom for students with ED. She also supported students with ED in the general education setting.

The secondary observer was a paraprofessional with extensive experience and held an associates degree. She had been employed in the district for 19 years supporting student across elementary and secondary grade levels. The secondary observer had been employed in the middle school for 12 years. All four observers were very comfortable with data collection as a result of observing and collecting data to measure student

academic or behavior skills or needs in their role supporting students receiving special education services.

Overview of Research Design

Single-Subject Design

This study used a multiple baseline across participants single-subject research design to answer the research questions guiding this study. Over the years, single-subject research designs have gained popularity in documenting the outcomes of individual behavioral interventions implemented within educational settings (Gast, 2010). In fact, single-subject designs are considered by some researchers to be one of the better methods to evaluate an intervention's effectiveness, particularly in an educational setting (Alnahdi, 2015).

Purpose of Single-Subject Design

The purpose of a single-subject design is to examine the effects of the introduction of a given independent variable (e.g., intervention) on a dependent variable (e.g., teacher or student behavior). Compared to group designs which measure the effectiveness of a specified intervention through cumulative estimations of behavioral data, single-subject designs focus on a detailed description of the individual and the analysis of the individuals' response to an intervention (Gast & Ledford, 2014).

Overview of the Study

The current study utilized a multiple baseline across participants design (Richards et al., 2014). This design was used to examine the effects of a within-school consultation intervention on middle school general education academic teachers' rates of BSP used with students with ED during content area classroom instructional time.

Multiple Baseline Single-Subject Design

Baseline data collection starts at the same time for each tier (participant). For this study, three tiers were represented. According to the *What Works Clearinghouse* (Kratochwill et al., 2013), six phases should be represented in the study (up to four participants). Each participant experiences a baseline and an intervention phase, resulting in six total phases. During each phase (baseline and intervention), a minimum of five data points should be collected. Each observation is represented by one data point. This allows a typical pattern of responding to be established. Staggering entrance into the intervention phase controls extraneous factors that could affect internal validity. This baseline phase serves to establish a typical level of targeted behavior prior to the intervention. During the intervention phase, the participant is receiving intervention or treatment. Study participants (observers and teachers) were not informed of the beginning or of the end of each phase of the study.

Limitations of Single-Subject Design

A common criticism surrounding the use of single-subject research designs is the lack of generalization beyond the individual or the few participants, potentially, compromising external validity (Gast, 2014). To mitigate lack of generalization and the possibility of compromised external validity, researchers should compare prior studies with their current study for similarities during the baseline phase and examine functional changes that occur during intervention implementation. Doing so will promote generalization of findings and promote evaluation of external validity (Gast, 2014; Gast & Ledford, 2014; Kazdin, 1982; Kennedy, 2005).

An additional criticism to single-subject design is due to the lack of a control group to compare effectiveness (Kratochwill et al., 2013). However, arguments opposing this criticism contend that single-subject design allows the participant to serve as his or her own control (baseline) which facilitates demonstrations of experimental control (Kazdin, 1982).

Rationale for Selecting Multiple-baseline Single-Subject Design

To effectively address the research questions in this study, a single-subject multiple baseline research design across subjects (teachers) was used. This research design was chosen since it allowed the measurement of the relationship between a single intervention and independent variable (within consultation model) on a teacher's use of BSP during classroom instruction provided to a target student with ED.

Variables

Independent Variable

The independent variable for this current study was within-school consultation intervention (Sprick, Knight, Reinke, & McKale, 2006). The within-school consultation intervention process included weekly collaborative mentoring meetings, goal setting, and visual performance feedback (graph) depicting the rate of BSP provided to the target student with ED. An overview of the within-school consultation model is provided here.

The within-school consultation model consisted of a 20-minute feedback session separated into two parts. The first part of the session included a review of verbal definitions of BSP, general praise, and reprimands. Next, the researcher provided explicit written examples and non-examples of BSP, general praise, and reprimands.

The second part, teacher observation feedback, consisted of five steps. The first step, the introduction, allowed the teacher time to discuss the positive experiences and the struggles experienced with using BSP in the classroom. Next, the researcher and teacher reviewed the data collected during classroom observations.

During the initial consultation session, the researcher provided visual performance feedback VPF (graph) of the baseline usage of general praise, BSP, and reprimands used in the classroom with a student with ED. During each subsequent session, the researcher presented data collected during the intervention phase. The teacher reviewed the graph and asked questions regarding the data collected.

Next, the teacher created or revised a goal, based on the data provided in the graph. The teacher created a goal to reflect the current use of BSP in the classroom. The researcher and the teacher scheduled the next consultation session during the fourth step of the model. After the teacher had entered the intervention phase, the researcher and teacher scheduled a consultation session at the end of every two observations. After every two classroom observations, consultation feedback occurred within 24 hours. The last step included the conclusion of the session and provided the teacher an additional opportunity to ask questions. At that time, the teacher was reminded when the next consultation meeting would take place.

Dependent Variables

Three observable teacher dependent variables were examined in this study. The three teacher dependent observed variables were: (a) behavior-specific praise (BSP), (b) general praise, and (c) reprimands used with students with ED. The rates of general praise, BSP, and reprimands were collected using frequency recording during two 15-

minute direct observations conducted twice during a 90-minute classroom instruction.

Although the rate of BSP delivery was the primary behavior examined for this study, it seemed reasonable to contrast BSP with general praise and compare BSP with reprimands as a competing behavior. General praise, BSP, and reprimand frequency data were collected through observation using a pencil-paper frequency data collection tool (see Appendix A). A paraprofessional was present in the classroom. If the paraprofessional provided general praise, BSP, or a reprimand during the session, the statements were not recorded.

Intervention Training

In a single-subject multiple baseline research design, the intervention process incorporates three phases: baseline, intervention, and follow-up (Kazdin, 1982; Kennedy, 2005). This section describes the training procedures for the independent variable (within-school consultation model) for each phase of the intervention (see Figure 2). Once participant consent was signed, the researcher began the training. The role and responsibilities across the three phases of the study was also discussed.

Internal validity is controlled by multiple baseline	IRB Approval	External validity is controlled by replication
	District Approval	
	Meet with school administrators to discuss study	
	Recruit participants and sign consent	
	Train: Observers to collect general praise data, BSP, and reprimand data using frequency recording.	
	Baseline phase: Minimum of five data points collected for teachers (5+) data were collected twice (two 15-minute observations) during a 90-minute block schedule.	
	Feedback: Teachers received feedback about data collected at baseline	
	Train: Each teacher moved out of baseline and into intervention phase using a staggered approach (when baseline is stable) at five data points or when a trend was observed. Train teachers in BSP and consultation model.	
	Intervention phase: (met with teacher and followed consultation model for 20-observation sessions. Data were collected twice (two 15-minute observations) during each 90-minute block schedule.	
	Data collection: All observers started data collection on teacher praise rates. Use frequency recording	
	Feedback: Teachers received feedback via the consultation model and were provided with a graph of BSP use once after each of two observation sessions.	
	Monitor: Monitored treatment fidelity via a fidelity checklist and reviewed digital audio tapes of consulting sessions. Researcher monitored teacher 6-week intervention data.	
	Maintenance: 2-weeks of data collection without providing an intervention to assess if teachers maintain the intervention of increased use of BSP.	

Figure 2. Research design model.

Procedures

All procedures in this research investigation underwent a review by the Institutional Review Board (IRB) at University of Northern Colorado (see Appendix B) as well as through the research approval process via the school district's Office of Research Evaluation (see Appendix C). Informed consent was obtained from all participating participants before the initiation of this study to ensure that participant rights and wellbeing were being respected throughout this study.

Once permission was granted from the IRB, the researcher conducted research in a suburban school district at a middle school. This school met pre-established criteria for this study (i.e., enough students with ED to meet the methodological requirements).

After obtaining consent from the school, the researcher contacted the target school's administration to discuss the study. While meeting with the school's administration, the researcher explicitly explained the purpose, recruitment of participant's, procedures, steps, roles and responsibilities of participants, and follow-up phase once the study was concluded. Potential harm and benefits to all participants (observers, teachers, students, and paraprofessionals) was also discussed at that time. When discussing potential participants with the school administration, the researcher described, in detail, the criteria for each targeted participant group (observer, teacher, and paraprofessional), as well as the procedures for obtaining observer consent, teacher consent (see Appendix E), and paraprofessionals consent (see Appendix F).

Next, the researcher asked the school administrator for a time and date to present an overview of the study to the school certified staff. The researcher described the details of the study and emailed study information to all interested potential participants. Three dyads consisting of observer and teachers were sought. Participants who volunteered for the study received a gift card worth \$50 as appreciation for their time.

To ensure confidentiality of participants, access to all raw data, such as teacher frequency data and Excel spreadsheets, and consultation integrity checklists were limited to the primary researcher and data collectors. To protect participant confidentiality, participants were assigned random numbers that were used at all times in all documents. A master spreadsheet with identifying numbers that linked names with codes was

maintained in a sealed envelope in a separate secure location in the main school office. A hard copy of raw data were stored in a locked file cabinet inside the school office. All electronic files (e.g., spreadsheet, database, graphs, etc.) containing identifiable information were password protected. Any computers holding files related to the study were also password protected to prevent access by unauthorized users. Only the researcher had access to the passwords. All raw and electronic data were stored in a secured location (i.e., password protected computer or locked file cabinet) and will be kept for three years. Data were stripped of identifiers and will be stored five years. Participants' names and specific information about the school will not be identified in any publications or presentations. The fidelity data obtained via digital audio recordings were transferred to a fidelity checklist and then erased.

Classroom Selection

Classroom selection was established in three phases. The first phase consisted of meeting with the school principal to establish which students with ED received instruction inside the general education classroom. Next, the principal reviewed each student's schedule to determine which general education academic teacher provided instruction to the student. The principal then provided the researcher with the list of teachers. The researcher contacted the teachers on the list, provided additional information, and obtained consent from volunteer participants (see Appendix D). Each participant group had designated responsibilities. These responsibilities were delineated by when they were expected to be implemented (see Table 3).

Table 3

Roles and Responsibilities of Participants

Participant	Implementation Schedule		
	Initial	Daily	Weekly
Researcher	Conduct trainings in the consultation model and observation process	Answer questions via face to face or via email.	Create Excel spreadsheet Bring graph to meeting
	Establish the first goal based on the teacher baseline data	Teach the intervention (consultation model) to the teacher	Conduct meeting Follow and complete consultation agenda
		Provide feedback within 24-hours of second observation	Digitally record consultation meeting
			Digital recorder given to an independent rater, complete consultation agenda, data collection forms, and graph
Observer	Attend training with researcher	Conduct teacher observations and collect data	Turn in data to researcher
Teacher	Attend initial consultation meeting	Increase BSP rate	Meet with researcher
			Follow consultation agenda
Paraprofessional	Attend training with researcher	Collect teacher data	Turn in data to consultant to be graphed

Training Procedures

During the training phase, all observers were trained, first as a group, followed by teachers who received training on a one-on-one basis. Observer training consisted of each observer attending three 30-minute training sessions over a three-day training period. As each teacher entered the intervention phase at a different point in time, each teacher received one-on-one training with the researcher (see Figure 2). All trainings occurred in a designated training area in the school.

Prior to conducting classroom baseline observations, the researcher trained the four observers (three primary and one secondary or inter-rater observer). The four observers (one teacher and three paraprofessionals) collected BSP, general praise, and reprimand frequency data in the classroom for a total of six weeks. The observers engaged in three 30-minute training sessions. During the initial 30-minute training session, the researcher provided training materials to each observer. The materials included: (a) operational definitions of BSP, general praise, and reprimands (see Appendix G), (b) written examples and non-examples of BSP, general praise, and reprimands (see Appendix H); (c) rationale and research supporting the use of BSP (see Appendix I); and (d) data collection forms (see Appendix A). The researcher reviewed the three training documents by reading and explaining each document to each observer and answering any questions related to the three training documents.

Next, each observer watched three video vignettes. The vignettes consisted of teachers demonstrating BSP, general praise, and reprimands in the classroom. The videos were found on YouTube (see Appendix J). The videos provided visual examples of the dependent variable (BSP) and examples of general praise and reprimands. Clarifying questions were answered during this time. Once questions had been answered, the next 30-minute training meeting was scheduled.

During the second session of training, the observer became familiar with the teacher data collection tool (see Appendix A). The final session consisted of the observer's observation training. The observer watched a training video of a teacher providing group instruction. The observer practiced collecting general praise, BSP, and reprimand data. The data collection tool was used during the practice to collect data on

the frequency of general praise, BSP, and reprimands directed to students in the general education class. The observers watched the video footage of classroom teachers providing academic group instruction to a class. Observers were instructed to identify and code one type of praise statement (i.e., general praise) that was viewed in the training video. The video was paused so observers could ask clarifying questions and discuss coding procedures.

Next, the observers watched the video footage again. This time, the observers were instructed to identify and code only BSP. The video was paused as observers asked clarifying questions and discussed coding procedures. The same video was viewed a third time; the observers were instructed to identify and code reprimands. The video was paused to allow observers to ask clarifying questions and to discuss coding procedures once again.

Next, the observers watched a new video of classroom instruction and coded all three behaviors (general praise, BSP, and reprimands). The observers' data were compared with the researcher's data. The data were then compared across-observers to determine inter-observer rater agreement. At that time, the researcher answered any clarifying questions and discussed scoring discrepancies. The researcher provided the observers with two additional videos to practice coding. Observers continued to practice coding until each achieved 90% inter-observer agreement.

Observers met again for the third 30-minute training session and coded a final classroom video together (without pausing for discussion). During this observer training session, all observers and the researcher viewed the video footage of three videos and simultaneously coded each video footage for general praise, BSP, and reprimands.

Criteria for observation mastery was the completion of a quiz of operational definitions with 90% inter-observer agreement and 90% inter-observer agreement on three prerecorded instructional videos of classrooms. Training fidelity was monitored by a training checklist (see Appendix K). Each observer participant signed the training checklist indicating each participant received each part of the same training.

Reliability

Inter-Rater Observer Agreement

Observers were trained in frequency data collection prior to the beginning of baseline observations. Three 30-minute trainings were conducted. Training materials included: (a) definitions of BSP, general praise, and reprimand statements; (b) written examples of BSP and non-examples of BSP, general praise, and reprimands; (c) rationale and research supporting the use of BSP; (d) data collection forms; and (e) the watching and coding of four videos.

Observers watched the videos and scored the videos over the three sessions. During the third and final training session, observers watched and scored the final video for the teachers' use of BSP, general praise, and reprimands. The observers' scores were rated against the researcher's pre-scored frequency data collection sheet. Secondly, the observers were given a quiz on the definitions and were asked to provide examples of BSP, general praise, and reprimands. Observer scores are provided in Table 4.

Table 4

Mean Scores of Observer Final Video and Final Quiz

Observer	Video Final Score	Quiz Final Score
Observer 1	93%	100.0%
Observer 2	92%	100.0%
Observer 3	96%	100.0%
Observer 4	92%	91.0%
Mean Scores	93%	97.5%

The average mean level for the final video score was 93%. This mean level average met the established criteria of 90%. The average mean level for the final quiz score was 97.5%. This average fell within the 90% established criteria. Since both scores fell well above the established 90% criteria in both areas at the conclusion of the training sessions, additional observer training was not required.

Direct Observer Reliability

The most commonly used consensus coefficients for calculating inter-rater reliability are percent agreement and percent adjacent (Brown, Glasswell, & Harland, 2004). Since the rater scores included exact and adjacent agreement, percent agreement and the adjacent agreement was used for this study. The raters' scores were considered exact agreement if scores were 90% or having reached consensus if scores fell within 1 point below 90%. The percent adjacent agreement calculation allowed raters to not have to be retrained to reach the exact agreement, but rather a consensus. Stemler (2004) indicated the literature regarding inter-observer agreement (IOA) provides a guideline that consensus is reliable above 70%. Inter-observer reliability of 90% for combined

percent exact agreement and percent adjacent agreement was the set criterion level for this study.

Observer Drift

Observer drift occurs when two or more human observers gradually drift consensually in how they use a coding system over time (Horner et al., 2005; Romanczyk, Kent, Diamant, & O’Leary, 1973). Observer (rater) drift can distort data if the coding scheme is not implemented with fidelity (Gast, 2010; Kennedy, 2005). To minimize observer drift and increase observation fidelity, 20% of each teacher’s observations were observed by a secondary and primary observer. A total of 120 observations occurred by the three primary observers, and 20% (24) of observations occurred by the secondary observer across three phases of the study.

During each phase of the study, baseline, intervention, and maintenance, the secondary data collector simultaneously and independently coded the observed behaviors while the primary observer coded the same observed data. Both primary and secondary teacher observers used the same data frequency data collection tool (see Appendix A) during the same 15-minute observation time.

Once the interrater observation was completed, the observers turned in the data collection sheets to the researcher. The researcher reviewed the data collection sheets for inconsistencies. If consistencies were identified, the two observers would come to a consensus regarding the inconsistencies in the data.

The percentage of IOA over phases was calculated by comparing the two observers’ scores. The raters’ scores were considered exact agreement if scores were 90% or had reached consensus if scores fell within 1 point below 90% (Brown et al., 2004).

After each IOA observation, both observers compared tally marks in each category of data collected. If the scores were 1 point apart in the data collection of BSP, general praise, or reprimands, the observers reached consensus regarding the discrepancy in the score, and the final score was tallied.

The percent adjacent (reaching a score of plus or minus 1 point) agreement calculation allowed raters to not have to be retrained to reach the exact agreement, but rather a consensus (Brown et al., 2004). A total of 90% or above in agreement between the two raters established a level of IOA criteria over the three phases of the intervention and, therefore, the observers did not require additional training. If the IOA fell below 90% for any given week, raters were retrained. Weekly calculations of IOA occurred for 20% of the observations. The overall mean level of IOA across the three observers was in 97 % agreement with a range of 96% to 99%.

Teacher Training

The three teachers participating in the study attended two one-on-one 45-minute meetings (a total of 90 minutes). During this time, the researcher explained the intervention. The first 45-minute meeting consisted of the researcher discussing the following training components with the teacher: (a) verbal and written definitions of BSP, general praise, and reprimands (see Appendix G); (b) examples and non-examples of BSP, general praise, and reprimands (see Appendix H); (c) rationale for BSP (see Appendix I); and (d) examples of student behaviors that warrant praise. Next, the teacher was provided an opportunity to practice BSP. Training feedback included praise for teachers who provided examples of BSP and corrective feedback and additional modeling for non-examples of BSP. Each teacher had to be able to identify and provide examples

of BSP statements with 80% accuracy in order to move into the second training session. For teachers who did reach 80% accuracy, additional one-on-one training was provided. All participants met the 80% accuracy and did not require additional training.

The second 45-minute training session included: (a) an explanation of the consultation model (see Appendix J); (b) an explanation of a weekly consultation agenda (see Appendix M); (c) the purpose of the teacher digital audio recording device; (d) a description and example of frequency charting of general praise, BSP, and reprimands through tally marks; (e) a demonstration and example of the Excel graphing program; and (f) the ability to practice each step of the consultation model. To ensure training fidelity, a teacher training checklist was used (see Appendix L). At the conclusion of the training, the participants were given a social validity survey to rate the effectiveness of the training.

Establishing Phase Change

The three phases of multiple baseline single-subject design include baseline, intervention, and follow-up. Prior to the intervention phase, a stable baseline of observed behavior was established (Kazdin, 1982; Kennedy, 2005; Kratochwill et al., 2013). For this current study, data were graphed to allow for the observation of baseline and to establish an initial pattern of response for each teacher.

Criteria for baseline stability is described below. The establishment of a stable baseline required that a non-substantive trend or a trend opposite from that predicted by the intervention be observed (Horner et al., 2005). The stability of baseline data were determined for each teacher. Stability of data determined the order of movement to the intervention phase for each group. In order for criteria for the data to be considered

stable, the data points could not vary more than 2 points over five days. If this occurred, the data were considered stable. Baseline also was considered stable if the data demonstrated a consistent or repeating pattern over five days. This process was used to determine the termination and start of each phase of the study.

Baseline

Each participating teacher entered the baseline phase at the same time. During the baseline phase, the teachers interacted with their class and provided instruction in a natural and usual manner. At that time, no changes or interventions regarding teachers' behavior were provided. Each teacher remained in the baseline condition for a minimum of five data points, or until a clear pattern of behavior-specific praise was established (i.e., three or more consecutive data points with visual evidence of stability).

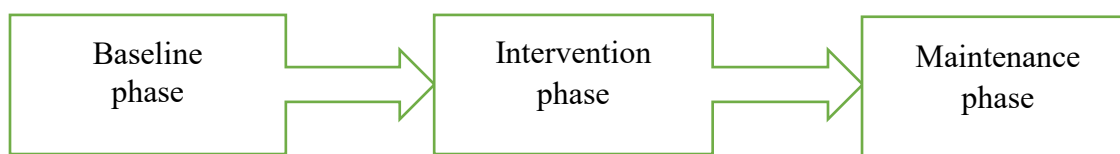


Figure 3. Study phase sequence for participants.

Baseline Data Collection

During baseline, each trained observer directly observed their assigned teacher providing classroom instruction during the first half hour for 15 minutes and during the last half hour for 15 minutes. During the two 15-minute observations, the observer collected frequency data on the use of BSP, general statements, and reprimands using the frequency data collection form (see Appendix A). When the teacher provided general praise statements, BSP, or reprimands to the student with ED, the observer drew a tally mark on the teacher frequency data collection form. During that time, the teachers were not provided information or training related to effective classroom management strategies

or feedback on their instructional delivery or performance. Through this design, the effects were replicated to demonstrate experimental control.

Intervention Phase

Following a stable baseline which had had five or more data points that did not vary more than 2 points and demonstrated a decreasing trend or a baseline praise rate (Kazdin, 1982; Kennedy, 2005), Teacher A was introduced to the intervention. Following Teacher A, each subsequent teacher was introduced to the intervention in a staggered approach, wherein all teachers and observers began the study intervention at different points in time. For example, once the first teacher and observer established a stable baseline, the intervention (independent variable) began, while the other observer and teacher pairs remained in the baseline phase, meaning some teachers and observers were in baseline for more or fewer weeks than others. During each phase (baseline, intervention, and maintenance), the researcher manipulated the independent variable relative to which phase of the study the data collection was occurring.

Consultation Procedures

Once a teacher established a stable baseline of five data points that was absent of trend or slope and minimum variance in behaviors was observed, the researcher met with that teacher and explained the consultation process intervention (Kazdin, 1982; Kratochwill et al., 2013). At that time, the intervention phase of the study began for that teacher. As each subsequent teacher entered the intervention phase, the researcher followed the same steps outlined in the consultation protocol for each teacher who entered the intervention phase.

During each consultation session, the researcher reviewed the baseline data with each teacher that entered the intervention phase. The researcher provided each teacher with feedback (verbal and visual) from the data collected during their classroom baseline observations. Next, the researcher provided teachers with specific examples of BSP that were used in their classroom during their baseline data collection. Teachers were shown a visual performance feedback (graph) of baseline usage of BSP, general praise, and reprimands used in their classroom with student participants. Next, teachers were asked to identify specific situations where they might have been able to increase the use of BSP during instructional time.

Finally, the researcher and the teacher collaboratively set a goal of increasing BSP. Teachers were given an opportunity to ask questions and were thanked and reminded when the next observation would take place.

After the completion of two 15-minute teacher observations, each subsequent consultation session lasted approximately 15 to 20 minutes. A 15-minute observation segment was selected based on the literature (e.g., Sutherland & Wehby, 2001; Sutherland et al., 2000). During that time, the teacher and researcher: (a) reviewed the teacher's goals for the three dependent variables (general praise, BSP, and reprimands) from the previous week; (b) reviewed graphed visual performance feedback data collected by the observer during observations in the classroom; and (c) reviewed examples of BSP. The teacher then reflected on the use of BSP based on the verbal and visual feedback provided and created a plan to increase or refine the use of the BSP and to meet the new BSP goals established for the upcoming week. The researcher followed

the outlined initial consultation framework and provided visual feedback (graph) of the general praise, BSP, and reprimand data to the teacher.

Each subsequent consultation session occurred within 24 hours of the second observation session. The consultation protocol (see Appendix M) that combined strategies used by Sprick et al. (2006) and Uncommon Schools (2017) was used in each consultation session and included the following steps. Each consultation session was digitally audio-recorded. To monitor the fidelity of the consultation process, an observer listened to 20% of the recorded consultation meetings, which occurred after two data points during the intervention (a total of 20 data points). The intervention integrity was rated against the 10 consultation feedback checklists.

At the conclusion of the four-week intervention phase, the follow-up (two weeks for each participant) occurred. During this phase, teacher and student classroom observations continued in the same manner as for the baseline. The teacher did not receive the intervention (consultation process and inspection of the graph) to determine whether the BSP, general praise, or reprimand rates were maintained.

Social Validity

Social validity assesses the personal perceptions, procedures, and sustainability of an intervention (Kennedy, 2005). To assess social validity, participants were provided with a social validity survey after the study was completed (see Appendix N). The survey asked the teachers to rate the appropriateness of intervention procedures and intervention effectiveness using a series of Likert-scale items. Teacher perceptions were recorded using open-ended questions. The survey was administered electronically through an online anonymous survey service.

Treatment Integrity

Treatment integrity, also known as the fidelity of treatment implementation, is the educator's level of adherence to the treatment or intervention method conveyed in a professional development program. Treatment integrity was monitored by the researcher's use of a binder that described weekly consultation meeting procedures (see Appendix M). More specifically, the materials included: (a) a reference guide including operational definitions and examples (Slonski-Fowler & Truscott, 2004); (b) the data review schedule; (c) a consultation intervention script; and (d) a data coding checklist. Digitally audio-recorded consultation sessions were transcribed and reviewed against the consultation script for treatment integrity. Personal identifiers were removed after transcription and replaced with numeric codes and then erased.

Treatment integrity was assessed by the collection of permanent products (consultation checklist, data collection sheet, and digital audio-taped consultation meetings). To determine treatment integrity, a secondary rater listened to the digital recordings and completed a fidelity checklist for the correct implementation of the consultation session. Intervention fidelity was calculated by dividing the number of actually implemented steps completed by the total number of steps that should be completed and then multiplied by 100%. Gresham, Dart, and Collins (2017) argued that treatment integrity is essential for successfully delivering components of a strategy or plan intended to increase student performances and contribute to positive outcomes in the classroom.

Analyzing Data

Visual analysis was the primary means of evaluating the data collected for this multiple baseline single-subject across participants design. Through direct observations, the data collected during baseline, intervention, and maintenance phases were displayed on graphs (i.e., graphic analysis) for the purpose of drawing conclusions about any changes in the dependent variables (general praise, BSP, and reprimand rates) (Kazdin, 1982; Kratochwill et al., 2013). Visual inspection occurred by looking at the graphed data in relation to four specific steps and six variables across the different conditions (e.g., baseline, intervention, and maintenance) (Kazdin, 1982; Kratochwill et al., 2010).

The first step was to determine if a stable and predictable baseline pattern was present (e.g., teacher not providing BSP or teacher using reprimands). The next step consisted of analyzing the data within each phase to determine if sufficient data and data consistency occurred within each phase patterns. The third step compared the data in each phase. The last step of the visual analyses process integrated the information obtained from the three phases and evaluated if at least three demonstrations of the effect at points in time occurred to determine a functional relationship (Kratochwill et al., 2010).

The five characteristics that were visually inspected included: (a) the level or changes that occurred between the end of one phase and the beginning of the next phase; (b) the mean scores within phases were determined by looking at the average change in performance from one phase to the next; and (c) the dependent variables' trend and immediacy of change or the rate of change (Kratochwill et al., 2013).

The trend was identified when there was a systematic increase or decrease in the direction of the behavior in the different conditions of the design. If the intervention was

effective: (a) the trend would significantly increase or decrease with the onset of each new phase or there would be a complete reversal of the onset of a new phase; (b) the variability of range of scores around a level or trend line; and (c) evaluations of immediacy of change accounts for the change in behavior from the end of one phase to the beginning of the next (i.e., identified by a sudden change in the data) or the beginning of one phase and the end of the same phase.

Benefits of visual inspection included identifying changes attributed to the intervention. For example, clear distinctions between the occurrences of the dependent variable during baseline conditions as compared to during intervention conditions provided evidence of the effectiveness of the intervention. Such visual inspection provided a way of identifying large changes in the data. Changes that are large enough to be noticed through visual inspection are often attributed clinical significance, meaning that the changes are of practical value and have an impact in an individual's life (Kazdin, 1982). Through visual analyses, a functional relationship of the within-school consultation model and rate of BSP were established.

Transfer of Materials

Materials such as completed data collection sheets and consultation treatment integrity checklists were placed in a sealed envelope and placed into a locking cabinet in the principal's office. Participants were provided numbers in replacement of names. For example, Observer 1 and Teacher 1 was an assigned pair.

Validity

Internal Validity

Establishing internal validity (i.e., determining that the independent variable does, in fact, cause the change in the dependent variable) is essential when conducting a research investigation (Kazdin, 1982). Therefore, it is important to rule out potential threats to internal validity prior to making inferences or conclusions regarding the independent variable. Such threats include: (a) history or other explanations happening at the same time as the intervention; (b) maturation of the natural growth of subjects over time; (c) testing, the repeated exposure to assessments or instruments that measure behavior; (d) instrumentation or change of how performance or behavior is measured; (e) statistical regression, the repeated exposure to assessment; (f) selection bias differences that existed prior to introducing the intervention; (g) experimental mortality (attrition) or loss of participants over time; and (h) diffusion of treatment member of the control group that is exempt from receiving the treatment (Ary, Jacobs, Razavieh, & Ary, 2010).

Single-subject designs purposefully and systematically make changes to how an intervention is implemented. During the multiple baseline, single-subject study, threats to internal validity were controlled by staggering the introduction of the independent variable (within-school consultation model) across tiers. The observed behaviors were independent of each other, and the researcher evaluated how the target behavior responded to the changes across the tiers.

External Validity

External validity is defined as the ability to generalize the results of a particular investigation to other situations (such as people, settings, or target behaviors) (Barlow &

Hersen, 1984). The maintenance phase of single-subject design must be planned and is just as important as the intervention phase (Baer, Wolf, & Risley, 1968). The generalized behavior must be caused by the intervention and be observable, recordable, and replicable.

Before the results of any investigation may be considered generalizable, replication must occur (Kennedy, 2005). Because single-subject research designs lack the random assignment required to make it a truly experimental design, replication becomes even more important for generalization (Kratochwill et al., 2013). The greater the generalization (i.e., external validity), the stronger the intervention (Kazdin, 1982). However, the lack of generalization across subjects, setting, responses, times, interventionist, experiment reactivity and/ or assessment, pretest sensitivity, and multiple treatment interferences are external threats to single-subject design (Kazdin, 1982).

External validity was monitored through the use of the replication of the within-school consultation intervention across subjects. The study was written so that other researchers are able to replicate it. The participants, setting, procedures, and intervention were described clearly, and concisely, and completely so that other researchers are able to replicate it with fidelity.

Summary

Students with ED often demonstrate increased problematic behaviors in the classroom that often result in off-task classroom behaviors (Gable et al., 2012). Although research indicates that the use of praise is an effective alternative to the use of reprimands to off-task behaviors, the use of praise with students with ED continues to be minimal. This study utilized a multiple baseline across participants design (Richards et al., 2014)

methodology to investigate the effectiveness of a within-school consultation model incorporating visual feedback (graphs) to increase the rates of middle school general education teachers' use of BSP used with students with ED, treatment fidelity, and social validity.

CHAPTER IV

RESULTS

The purpose of this investigation was to examine the effects of a within-school consultation intervention on the rates of teachers' behavior-specific praise (BSP) statements provided to a target student with emotional disabilities (ED) in each of the general education academic classrooms during direct instruction. A secondary focus of this study was to explore whether the within-school consultation intervention influenced the rate of general praise and reprimands provided to the target student with ED during direct instruction in the general education academic setting.

This multiple baseline study was designed to answer the following research questions:

- Q1 Does the use of within-school consultants increase the rate of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in middle school general education academic classrooms?
- Q2 Does the use of within-school consultants maintain the use of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in the middle school general education academic classrooms after the intervention is terminated?
- Q3 Does the use of within-school consultants change the rate of general praise and reprimand statements used by teachers when providing instruction to students with emotional disabilities (ED) in middle school general education academic classrooms?

The results from the visual inspection of each teacher's graphed data and an overview of the social validity outcome measures are described in this chapter. Additionally, the reliability results of inter-observer agreement (IOA) and procedural fidelity ratings are discussed.

A multiple baseline across participants design was used to examine whether the use of a within-schools consultation intervention impacts the rate of BSP provided to students with ED. General education academic teachers were systematically trained in the within-schools consultation intervention. The intervention implementation was staggered across three teacher pairs across three phases (baseline, intervention, and follow-up). Through direct observation, trained observers collected frequency data on the use of BSP, general praise, and reprimands. Data were collected twice (two 15-minute observations) during each 90-minute block schedule. The researcher consulted with the teachers and provided visual feedback. At the conclusion of the intervention phase, teachers entered into the follow-up phase for two-weeks.

Research Question Results

Multiple baseline graphs for the three participating academic middle school teachers are shown in Figure 4. For each recorded 15-minute observation, the frequency rate of BSP statements, general praise, and reprimands were indicated on three separate graphs. The number of each observation is listed on the abscissa (x-axis), and the rate of the BSP, general praise, and reprimand statements are indicated along the ordinate (y-axis). Vertical lines indicate the three-phase changes (baseline, intervention, and follow-up).

Date	BSP Target Student	Total	BSP Class	Total	General praise Target Student	Total	General Praise Class	Total	Reprimand Target Student	Total	Reprimand Class	Total
3/26	/	1	////	5	//	2	/////	6	////	4	////////	7
3/26	//	2	///	3		0	///	3	//	2	///	3

Figure 4. Example of tally sheet.

The rate of BSP, general praise, and reprimand statement results for each participant are presented using graphed analysis. The results illustrate the represented rate of BSP, general praise, and reprimands delivered by each participant during the three intervention phases of the study.

Establishing Phase Changes

To determine the stability of the baseline data, visual inspection of a non-substantive trend or a trend opposite from that predicted by the intervention was observed (Horner et al., 2005). Baseline was also considered stable if the data demonstrated a consistent or repeating pattern over three to five days and the data points did not vary more than 2 points over five days. This process was also used to determine the termination and start of each phase of the study.

To answer the three research questions, a direct observation recording process was used to measure the frequency of BSP, general praise, and reprimand statements provided to a target student with ED in each of the three participating teachers' classrooms. Frequency recording was used to record the occurrence of the dependent variables (BSP, general praise, and reprimands) during a 15-minute observation session. Each observer tallied each occurrence of BSP, general praise, and reprimands provided to

the target student with ED during academic instruction (see Figure 4). To evaluate whether the use of a within-school consultation intervention (independent variable) had an effect on the rate of BSP, general praise, and reprimands (dependent variables), visual analysis of the graphed data points over the three phases of the study were conducted (Kazdin, 1982). The graphed data were examined for patterns and changes in level, trend, and variability from one phase of the study to the next (Figure 5). The latency of the change from baseline to the initiation of the intervention phase was also examined. Results for each research question are discussed below.

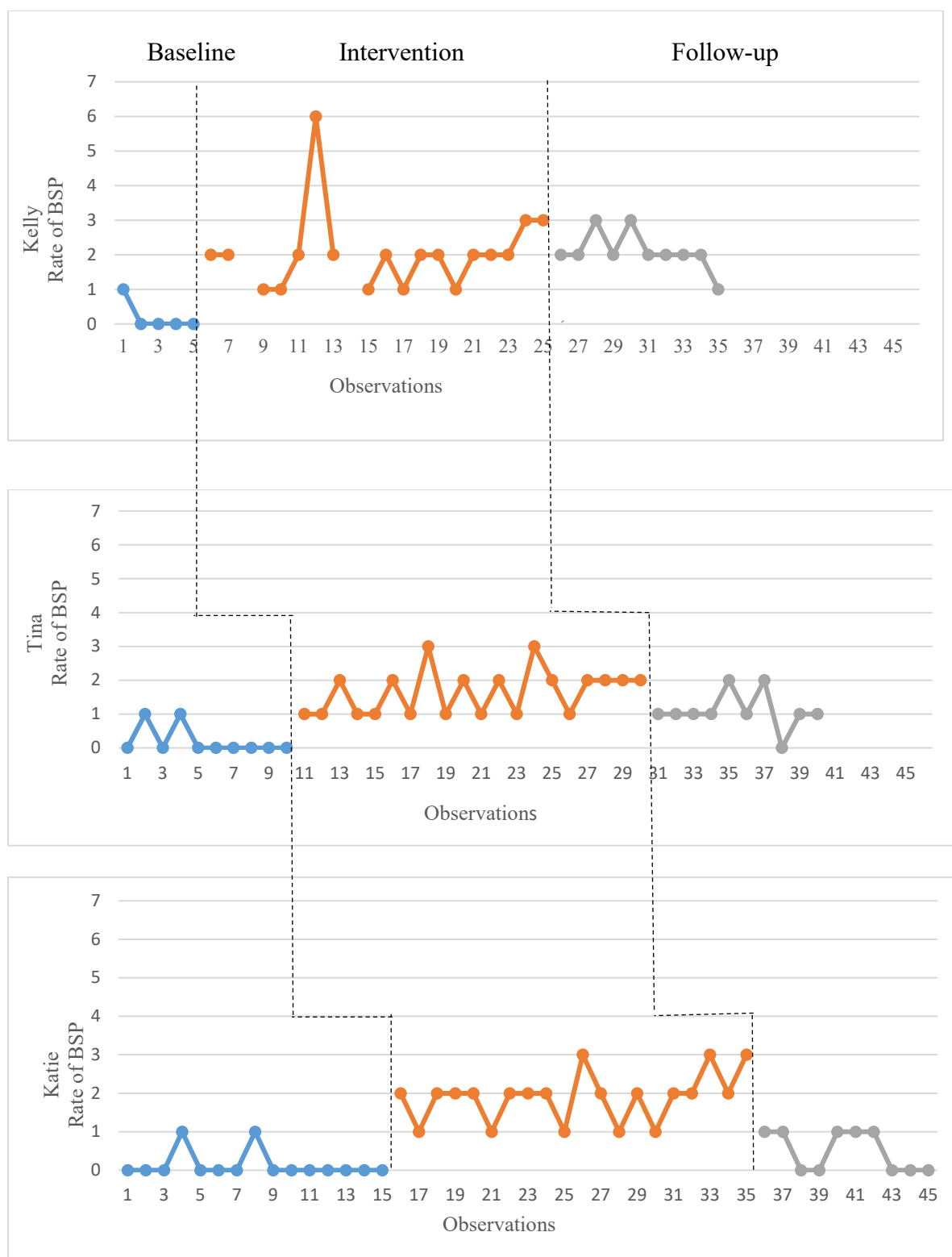


Figure 5. Rate of BSP provided to target students across phases of the study

Question 1

- Q1 Does the use of within-school consultants increase the rate of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in middle school general education academic classrooms?

Results were reported using the mean average, range, and percent of increase or decrease of BSP provided. Baseline and intervention results are discussed here.

Baseline. All three teachers demonstrated extremely low and generally stable levels of BSP during baseline that ranged from 0 to 0.20 per 15-minute observation ($M = 0.18$, $SD = 0.04$). Baseline results are described for each teacher.

Kelly. Kelly was a fifth-year teacher and taught seventh-grade science to 33 students at the time of this study. During her five baseline observations, Kelly provided one BSP statement during her first 15-minute baseline observation. During the four subsequent observations, Kelly delivered zero BSP statements. The number of Kelly's BSP statements ranged from zero to one per 15-minute observation ($M = 0.20$, $SD = 0.44$). She had a steady descending trend line for four consecutive observations. Kelly met the criteria of a stable baseline and was the first teacher to enter into the intervention phase (Figure 6).

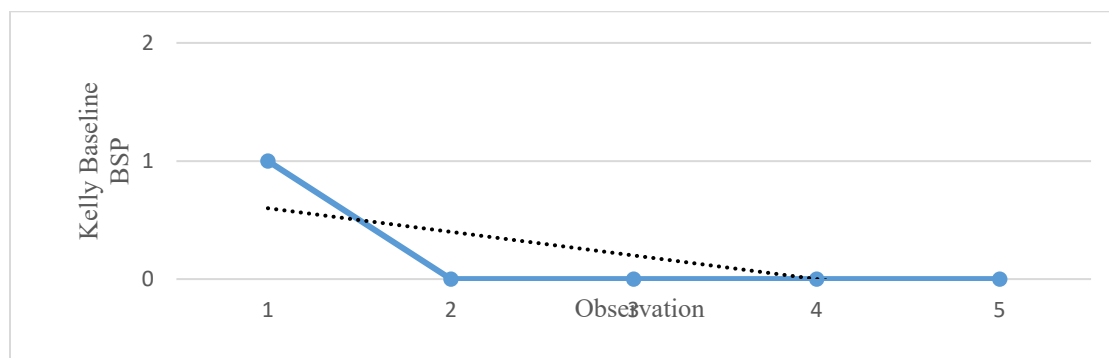


Figure 6. Behavior-specific praise baseline data for Kelly.

Tina. Tina had been teaching for a total of five years. This was her third year teaching social studies to sixth-grade students. She had a total of 28 students in her classroom. On her first and fourth days of data collection, Tina provided one BSP statement in only 2 of her 10 15-minutes observation to the target student with ED. During the remaining 8 baseline observations, the rate of BSP statements remained consistent at zero. Visual analysis indicated that aside from the first day and the fourth day of data collection, Tina's baseline data collection remained low ($M = 0.2$, $SD = 0.42$) per each 15-minute session and ranged from zero to one. Since Tina did not provide any additional BSP statements, the baseline demonstrated no increasing or decreasing trends in the frequency of BSP over the remaining 6 consecutive observations.

In addition, Tina's ratio of BSP to reprimands was less than four BSP statements to one reprimand statement per 15-minute observation. Tina met the baseline criteria and was the second teacher to enter into the intervention phase of the study (Figure 7).

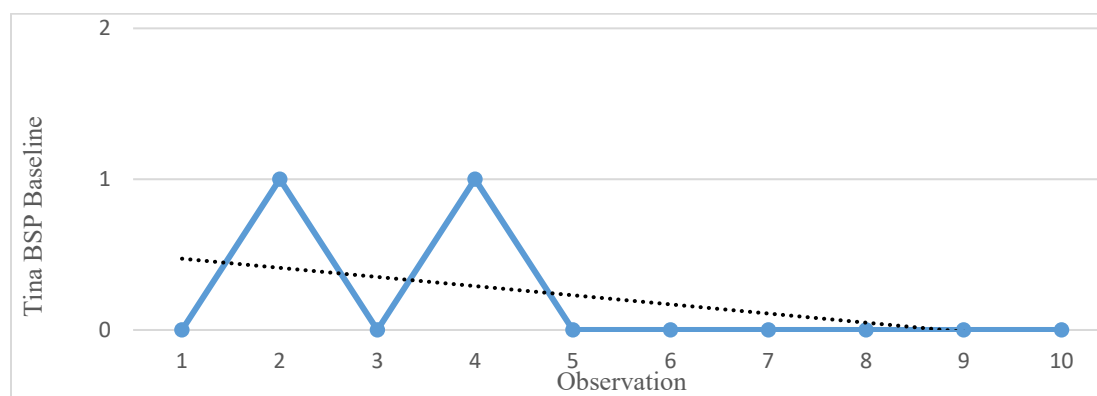


Figure 7. Behavior-specific praise baseline data for Tina.

Katie. Katie taught for a total of 11-years. Nine of her 11 years of teaching were in a middle school. This was her second year of teaching sixth-grade science at the school. She had a total of 30 students in her classroom. Katie was the last participant to

enter into the intervention phase; therefore, she was in the baseline phase of the study for the longest period of time (i.e., 15 baseline observations). During the fourth and eighth days of her baseline phase, Katie provided one BSP statement during the two 15-minute observations. Katie had no more than two BSP statements during the entirety of the baseline phase that ranged from zero to one ($M = 0.13$, $SD = 0.35$) per 15-minute observation. Katie also had a steady trend of zero BSP statements over seven consecutive observations. Katie did not achieve the ratio of four praise statements to one reprimand statement. Therefore, Katie met the established criteria of a stable baseline and entered the intervention phase (Figure 8).

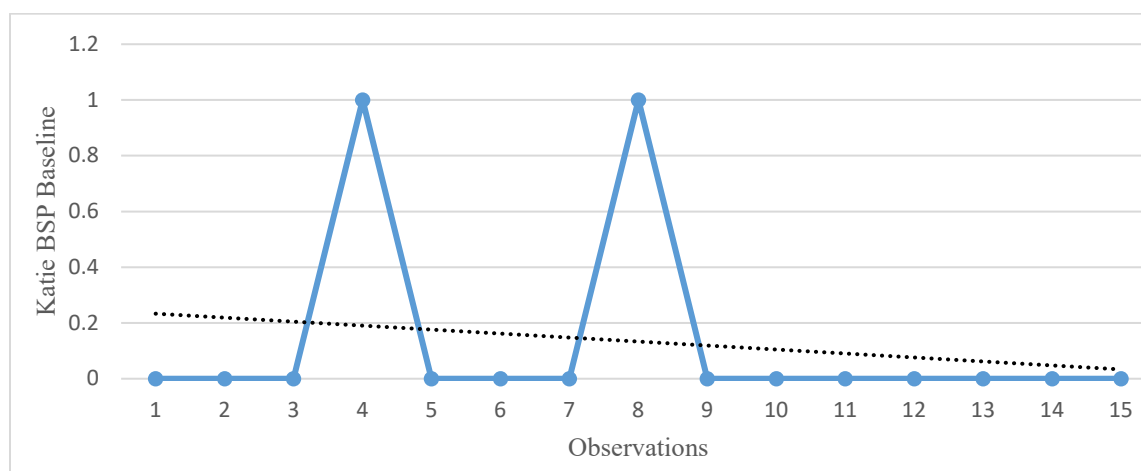


Figure 8. Behavior-specific praise baseline data for Katie.

At the conclusion of baseline, BSP statement per 15-minute observation ranged from zero to one ($M = 0.18$, $SD = 0.40$). These results are illustrated in Table 5.

Table 5

Mean Level and Range of BSP During Baseline

Teacher	Mean	Range
Kelly	.20	0 – 1
Tina	.20	0 – 1
Katie	.13	0- 1

Intervention. The introduction of the intervention resulted in an immediate increase in level, trend, or both for all three teachers. The results for each teacher are discussed here.

Kelly. Once Kelly began the intervention phase on the sixth day of data collection, an immediate and clear change was observed ($M = 2.0$, $SD = 1.16$), with a range in the number of BSP statements of zero to six per 15-minute observations compared to a range from zero to one ($M = 0.2$, $SD = 0.44$) at baseline. Kelly then demonstrated a slight positive trend over the four weeks of the intervention phase. Although Kelly demonstrated immediate improvement in rates of BSP, she had a high level of variability across the intervention phase with a range of one to six statements per 15-minute observation. Comparing to the mean of 0.2 at baseline to the mean of 2.0 at intervention, Kelly demonstrated a 164% increase in the rate of BSP statements provided to the target student in her classroom. Kelly was the first teacher to demonstrate positive intervention effects.

Tina. Visual inspection indicated a slight upward trend in the data during the 11th day of Tina's data collection. Tina's BSP statements ranged from one to three statements ($M = 1.4$, $SD = 0.67$) per 15-minute observation. Compared to the range of zero to one

BSP statement ($M = 0.2$) at baseline to a range from one to three BSP statements ($M = 1.4$) at intervention, Tina demonstrated a 150% increase in the rate of BSP statements provided during her 15-minute observation. Tina provided the second demonstration of positive intervention effect for this study.

Katie. Katie demonstrated a distinct change in her use of BSP when within-school consultation intervention was introduced. Visual analysis indicated an immediate increased change from the first day of the intervention phase on day 16 of data collection. Katie's BSP statements ranged from one to three statements per 15-minute observation ($M = 1.9$, $SD = 0.64$). Her rate of BSP continued an ascending trend for the rest of the intervention phase. Katie had a 173% increase from her mean of 0.13 at baseline to her 1.9 BSP statements per 15-minute observation at intervention. Katie was the last participant and also demonstrated a positive effect of the intervention. These results are illustrated in Table 6.

Table 6

Average Rate of BSP During Intervention

Participant	Baseline	Intervention	Percent Increase/ Decrease
Kelly	.20	2.0	164%
Tina	.20	1.4	150%
Katie	.13	1.9	174%

At the conclusion of the intervention phase, the rates of BSP provided to students during intervention ranged from one to six ($M = 1.8$, $SD = 0.32$). Overall, the three teachers increased their rates of BSP by an average of 163% from baseline.

Question 2

- Q2 Does the use of within-school consultants maintain the use of behavior-specific praise (BSP) statements used by teachers when providing instruction to students with emotional disabilities (ED) in the middle school general education academic classrooms after the intervention is terminated?

Follow-up of the use of BSP statements was analyzed. Results of this analysis are discussed here.

During this phase of the study, the teachers did not receive consultation or visual feedback regarding their rate of BSP provided to the target student with ED per a 15-minute observation. At the conclusion of the follow-up phase, two of three teachers sustained their use of BSP statements during the follow-up phase at similar levels to the intervention phase. The results for each teacher are described here.

Kelly. During the last phase of the study, Kelly had a slight increase of 5% in her rate of BSP statements during her follow-up phase. The rate of BSP statements ranged from one to three BSP statements per 15-minute observation ($M = 2.1$, $SD = 0.57$) compared to intervention ($M = 2.0$, $SD = 1.16$), with a range of one to three. While she increased her BSP rate, Kelly showed a decline of her BSP delivery to one statement per 15-minute observation. However, with this slight increase between intervention and follow-up, Kelly had demonstrated a 165% increase from baseline to the follow-up phase.

Tina. Visual analysis indicated Tina demonstrated an increased rate of BSP during follow-up. Compared to baseline ($M = 0.20$, $SD = 0.56$) with a range of zero to two, Tina's BSP rates ranged from zero to two ($M = 1.1$, $SD = 0.42$) at follow-up, indicating an increase of 135%. However, her rate of BSP statements decreased 24% from intervention, with a mean of 1.4 ($SD = 0.67$) to a mean level of 1.1 at the conclusion of the follow-up phase.

During seven days of follow-up, Tina provided one BSP statement per 15-minute observation 7 out of the 10 days of post-intervention. The remaining days, the teacher provided zero BSP statements on one day and two BSP statements on two days. Although Tina demonstrated an increase from baseline ($M = 0.20$) to follow-up ($M = 1.1$), she was unable to maintain the level of BSP statements provided during intervention through the last phase of the study.

Katie. Katie also showed the marked decrease level change in her rate of BSP during the last phase of the study. Her BSP rate ranged from zero to one per 15-minute observation ($M = 0.5$, $SD = 0.527$) compared to her mean level of 1.9 during intervention. This was a 116% decrease. However, Katie demonstrated an increase of 117% from a mean of 0.13 at baseline to a range of 0.50 at follow-up. During five days of post-intervention, Katie provided zero BSP statements to the target student during a 15-minute observation.

Overview of follow-up phase. Overall, the use of the within-school consultation intervention demonstrated positive effects from baseline to intervention. All three teachers demonstrated marked improvements in their rate of BSP provided to the target student with ED from a mean of 0.18 at baseline to a mean of 1.8 at intervention with a percent increase of 164% (see Table 7).

Table 7

Overview of BSP Trends Across Phases

Participant	Baseline	Intervention	Follow-up
Kelly	Descending	Ascending	Ascending
Tina	Descending	Ascending	Descending
Katie	Descending	Ascending	Descending

Mixed results occurred, however, during the follow-up phase of the study. Of the three participants, only one teacher maintained and slightly increased her level of BSP statements provided to the target student in her classroom. Kelly had a slight increase of 5% of her BSP statements at the termination of the intervention phase to the conclusion of the follow-up phase. Compared to Kelly, who maintained her level of BSP, Tina and Katie showed a combined decrease of 70% following the termination of the consultation sessions with visual feedback.

Questions 3.

- Q3 Does the use of within-school consultants change the rate of general praise and reprimand statements used by teachers when providing instruction to students with emotional disabilities (ED) in middle school general education academic classrooms?

General praise and reprimands. The use of frequency recording was tallied, and a percent of intervals target students received in general praise from his or her teacher was calculated. Results are reported using the mean average, standard deviation, range and percent of increase or decrease of general praise, and reprimands provided (see Figure 9).

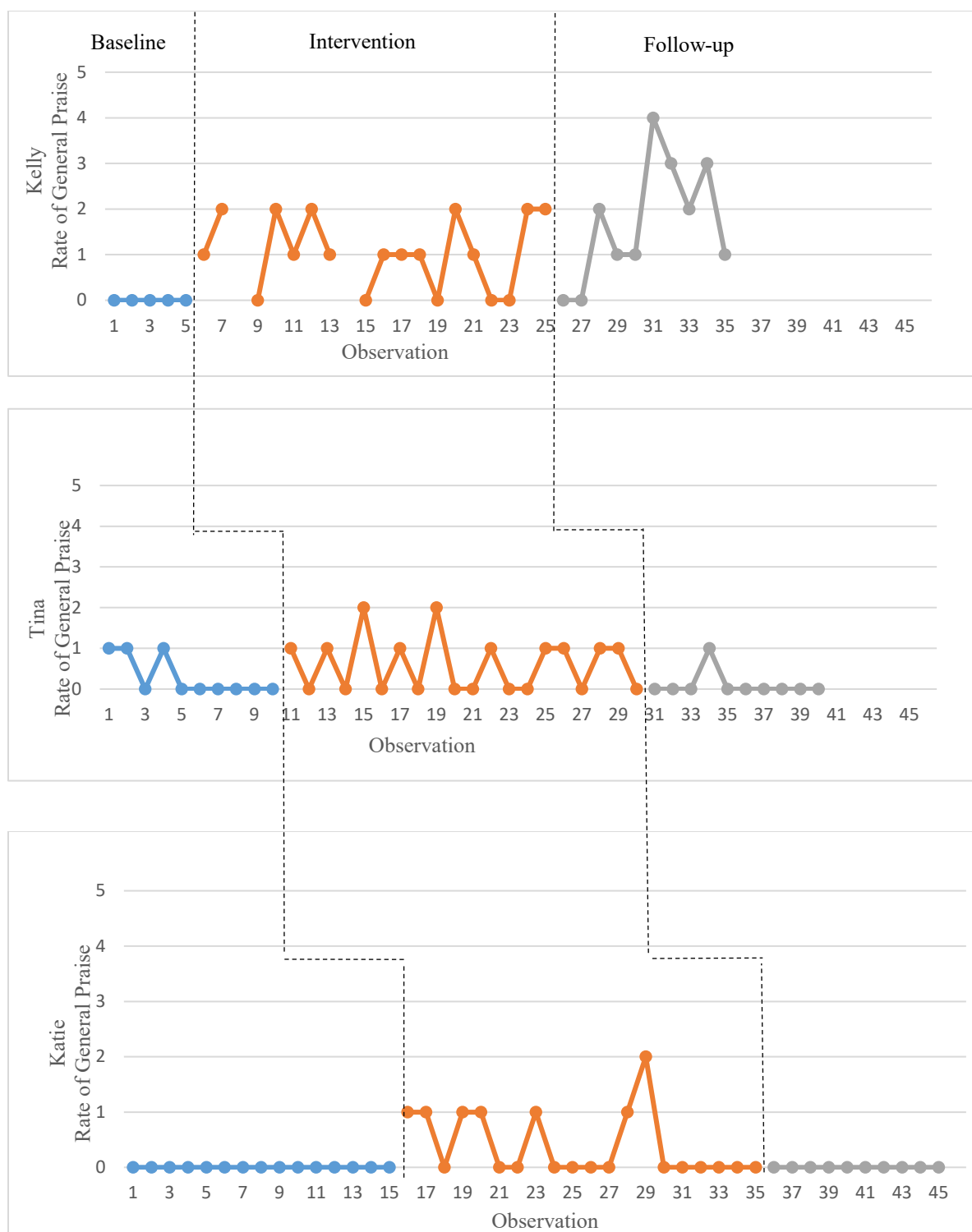


Figure 9. Visual data general praise.

General Praise. All three teachers demonstrated extremely low and generally stable baseline levels of general praise statements that ranged from zero to one ($M = 0.01$, $SD = 0.17$) per 15-minute observation. During intervention, the three teachers' general praise statements increased, ranging from zero to two ($M = 0.75$, $SD = 0.32$), a 153% increase. At the conclusion of the follow-up phase, general praise statements ranged from zero to four ($M = 0.53$, $SD = 0.84$). Results for each teacher during each of the three phases of the study are described here.

Kelly. During her five baseline observations, Kelly provided zero praise statements during her observations, therefore, establishing a clear zero stable trend line. Kelly's praise rates remained stable at zero.

Once introduced to the within-school consultation intervention, Kelly demonstrated an increase of her general praise rate by 105%. During the intervention phase, Kelly's rate of general praise ranged from zero to two ($M = 1.05$, $SD = 0.82$). On 14 out of 20 days of intervention, Kelly equally provided zero or one general praise statement. On 6 of 20 days, she provided two general praise statements.

At follow-up, Kelly maintained and surpassed her rate of general praise statements by 35% by providing 10 general praise statements. Her praise statements ranged from zero to four ($M = 1.50$, $SD = 1.43$) per 15-minute observation. Kelly also had a 150% increase from baseline ($M = 0$) to follow-up ($M = 1.50$). During 70% of the observations, Kelly provided at least one general praise statement to the target student with ED during academic instruction.

Tina. Tina provided one general praise statement during 3 of the 10 baseline observation sessions. During the remaining six baseline direct observations, Tina's rate of

general praise remained constant at zero. Visual analysis indicated that, aside from the first day and the fourth day of data collection, Tina's baseline data collection remained low ($M = 0.3$, $SD = 0.48$) per 15 minutes, with a range of zero to one with no increasing or decreasing trends in the frequency of general praise provided to the target student during instruction.

During the first day of the intervention phase, Tina showed an increase by providing one general praise statement. Although she increased her praise statements on the first day of intervention, Tina had 50% of her observations with zero general praise statements provided. Her general praise statements over the four weeks of intervention phase ranged from zero to two ($M = 0.6$, $SD = 0.68$), compared to a range from zero to one ($M = 0.3$) during baseline, a 66% increase.

At the conclusion of the consultation sessions, Tina demonstrated a 143% decrease in her rate of general praise statements from intervention to follow-up. Her general praise statements ranged from zero to one ($M = 0.1$, $SD = 0.32$) during the follow-up phase. Although she demonstrated a 66% increase from baseline to intervention, Tina did not maintain her level of general praise statements once the intervention was terminated. Tina also showed a decrease of 100% from baseline with a mean range between $M = 0.3$ to $M = 0.1$.

Katie. Similar to Kelly, Katie provided zero general praise statements during her 15 baseline observations, therefore, establishing a clear stable trend line. Katie's praise rates ranged from zero to zero ($M = 0$, $SD = 0$).

Compared to the baseline of zero, Katie provided one general praise statement the first two days of the introduction to the intervention. However, during the entirety of the

intervention phase, Katie provided zero general praise statements for 13 days of 20 observations. During the remaining 7 out of 20 observations, Katie generated one to two praise statements per 15-minute observation. Katie's general praise statements ranged from 0 to 2 ($M = 0.4$, $SD = 0.60$), an increase of 40%.

During the follow-up phase of the study, however, Katie reverted to baseline and provided zero general praise statements over the remaining 10 observations. Katie demonstrated a decrease in her general praise rate by 40%.

Overall, the introduction of the within-school consultation intervention increased the use of general praise 149% across all three teachers. The general praise statements ranged from zero to one ($M = 0.1$, $SD = 0.31$) at baseline and ranged from zero to two ($M = 0.75$, $SD = 0.68$) at intervention. Similar to the results of BSP, the use of the within-school consultation intervention demonstrated an increase in general praise statements provided to the target students with ED in the academic setting (see Table 8).

Table 8

Average Rate of General Praise Baseline to Intervention

Participant	Baseline	Intervention	Percent Increase/ Decrease
Kelly	0	1.05	105%
Tina	.3	.6	67%
Katie	0	.4	40%

The results, however, were mixed during the follow-up phase. One teacher of three maintained the use of general praise during academic instruction at the termination of the intervention. Kelly was the only teacher able to maintain and even increase her use

of general praise provided to the target student with ED during follow-up. Tina and Katie demonstrated a downward trend and a decrease in general praise statements that ranged from zero to four ($M = 0.05$, $SD = 0.23$), while Tina decreased 100% back to baseline and Katie reverted to providing zero general praise statements per 15-minute session. Although the three teachers demonstrated a marked increase in general praise statements, only one teacher maintained her general praise rate following the conclusion of the intervention, indicating ongoing support with visual feedback may maintain the rate of general praise provided during the intervention phase.

Reprimands. Overall, the three participants decreased their use of reprimands. The results are described here. Figure 10 displays visual data reprimands.

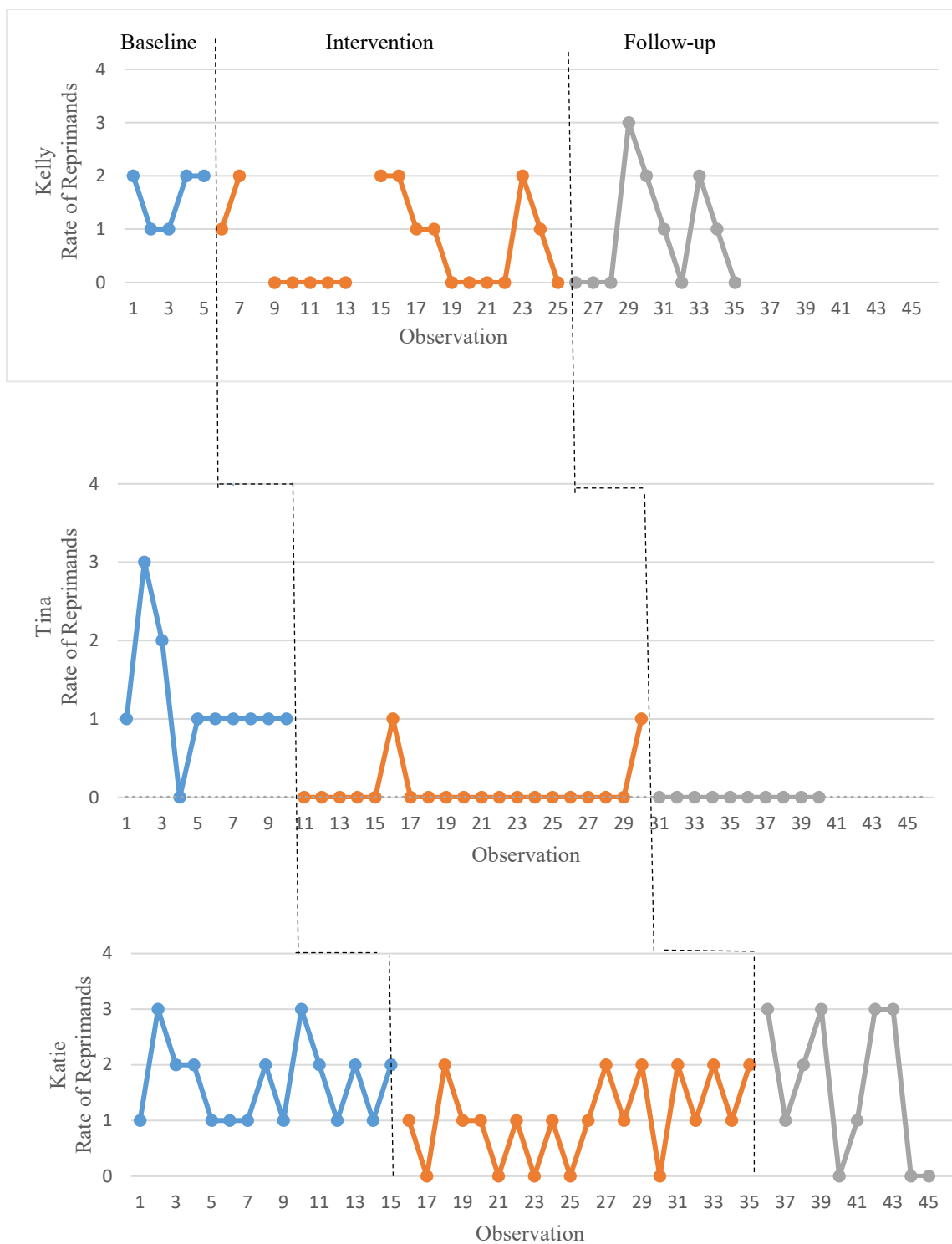


Figure 10. Visual data reprimands.

Kelly. During baseline, Kelly's reprimand statements ranged from one to two ($M = 1.6$, $SD = 0.54$) per 15-minute observation. She provided three reprimand statements per 15-minute observation on three of five baseline days observed. In other words, the target student with ED received two reprimands per 15 minutes during 60% of the observations.

On the first day of intervention, Kelly decreased her reprimand statements from two statements per 15-minute observation to one reprimand statement. During the direct observations, Kelly provided zero reprimand statements during 10 of the 18 observations. At the termination of the intervention phase, Kelly demonstrated a 91% decrease of reprimand statements from baseline with a range from zero to two ($M = 0.60$, $SD = 0.84$) to intervention with a range from one to two ($M = 1.6$, $SD = 0.54$).

During the follow-up phase, Kelly was unable to maintain her low rate of reprimand statements achieved during the intervention. Her reprimand statements ranged from zero to three ($M = 0.9$, $SD = 1.1$), a 40% increase from intervention. Although Kelly had an increase from the intervention phase to follow-up, she demonstrated a 56% overall decrease in her use of reprimand statements from baseline ($M = 1.6$) to follow-up ($M = 0.9$).

Tina. During baseline, Tina's reprimand statements ranged from zero to three ($M = 1.2$, $SD = 0.79$) per 15-minute observation. Tina provided three reprimand statements on the second day of baseline observation. However, during the last six consecutive baseline observations, Tina provided only one reprimand statement per 15-minute observation.

At the conclusion of the within-school consultation intervention, Tina decreased her reprimand statements by 169%. On the 11th day of data collection, Tina's first day of intervention, Tina's reprimand statements decreased from one to zero. Over the course of the intervention phase, Tina's reprimand statements ranged from zero to one ($M = 0.1$, $SD = 0.31$), a 169% decrease from baseline. Tina also demonstrated an additional 10% decrease in reprimand statements to zero reprimands over the 10 follow-up observations. Tina had a 120% decrease in her use of reprimand statements from baseline to follow-up.

Katie. Prior to the introduction to the within-school consultant intervention, Katie's reprimand statements ranged from one to three ($M = 1.7$, $SD = 0.72$) per 15-minute observation. During baseline, Katie provided two to three reprimand statements over 40% of the 15-minute observations during her academic instruction.

During the first day of intervention, Katie provided zero reprimand statements to the target student with ED. At the conclusion of the intervention, Katie demonstrated a 42% decrease in the use of reprimand statements. Her reprimand statements ranged from zero to two ($M = 1.1$, $SD = 0.75$). On five of the 20 observations, Katie provided zero reprimand statements to the target student with ED.

Although Katie demonstrated a decrease in the use of reprimands from baseline to intervention, Katie was not able to maintain the decreased rate of her reprimand statements during the follow-up phase. Katie demonstrated an increase of 37% of reprimand statements to 1.6 reprimand statements per 15-minute observation. This mean level of 1.6 is similar to Katie's baseline ($M = 1.7$) reprimand statements per 15-minute observation. Table 9 shows the average rate of reprimands for each of the teachers.

Table 9

Average Rate of Reprimands--Baseline to Intervention

Participant	Baseline	Intervention	Percent Decrease
Kelly	1.6	.67	-91%
Tina	1.2	.10	-169%
Katie	1.7	1.1	-42%

Overall, all three teachers increased their use of BSP by 164 % and general praise statements by 149% after the introduction of the within-school consultation intervention. The three teachers also decreased their rate of reprimand statements by 68% from baseline to intervention. However, while each teacher demonstrated an increase in BSP and general praise statements and a decrease in the use of reprimands from baseline to intervention, only one teacher met the suggested ratio of four praise statements to one reprimand statement (Myers et al., 2011) (see Table 10).

Table 10

Ratio of Average Positive (Behavior-Specific and General Praise) to Reprimands per 15-Minute Observation

Participant	Baseline		Intervention		Follow-up	
	BSP	General Praise	BSP	General Praise	BSP	General Praise
Kelly	1:8	0:2	3:1	2:1	2:1	2:1
Tina	1:6	1:4	14:1	6:1	1.1:0	.1:0
Katie	0:1	0:2	2:1	1:2	.3:1	0:2

Although the literature on teacher praise does not explicitly suggest how frequently teachers should provide praise in the general education classroom, the current

study used the recommended ratio of 4:1 BSP to reprimands. Of the three teachers, Tina demonstrated the greatest ratio increase in her delivery of BSP statements provided to the target student with ED. Tina's mean average of BSP statements ($M = 1.4$) to her reprimands ($M = 0.1$) equated to the ratio of 14 to 1. She also demonstrated the greatest increase of general praise statements to reprimands with a 6 to 1 ratio. Kelly was close to meeting the 4 to 1 ratio, with a ratio of 3 to 1 BSP to reprimands.

Baseline, Intervention, and Follow-Up Trends Compared

Visual inspection of each of the three teachers' rate of BSP, general praise, and reprimand statements demonstrated similar trends over the three phases of the study. The first teacher, Kelly, demonstrated an immediate increase in BSP and exhibited an upward trend. However, her rates of general praise and reprimand statements demonstrated a slightly decreased trend (see Figure 11).

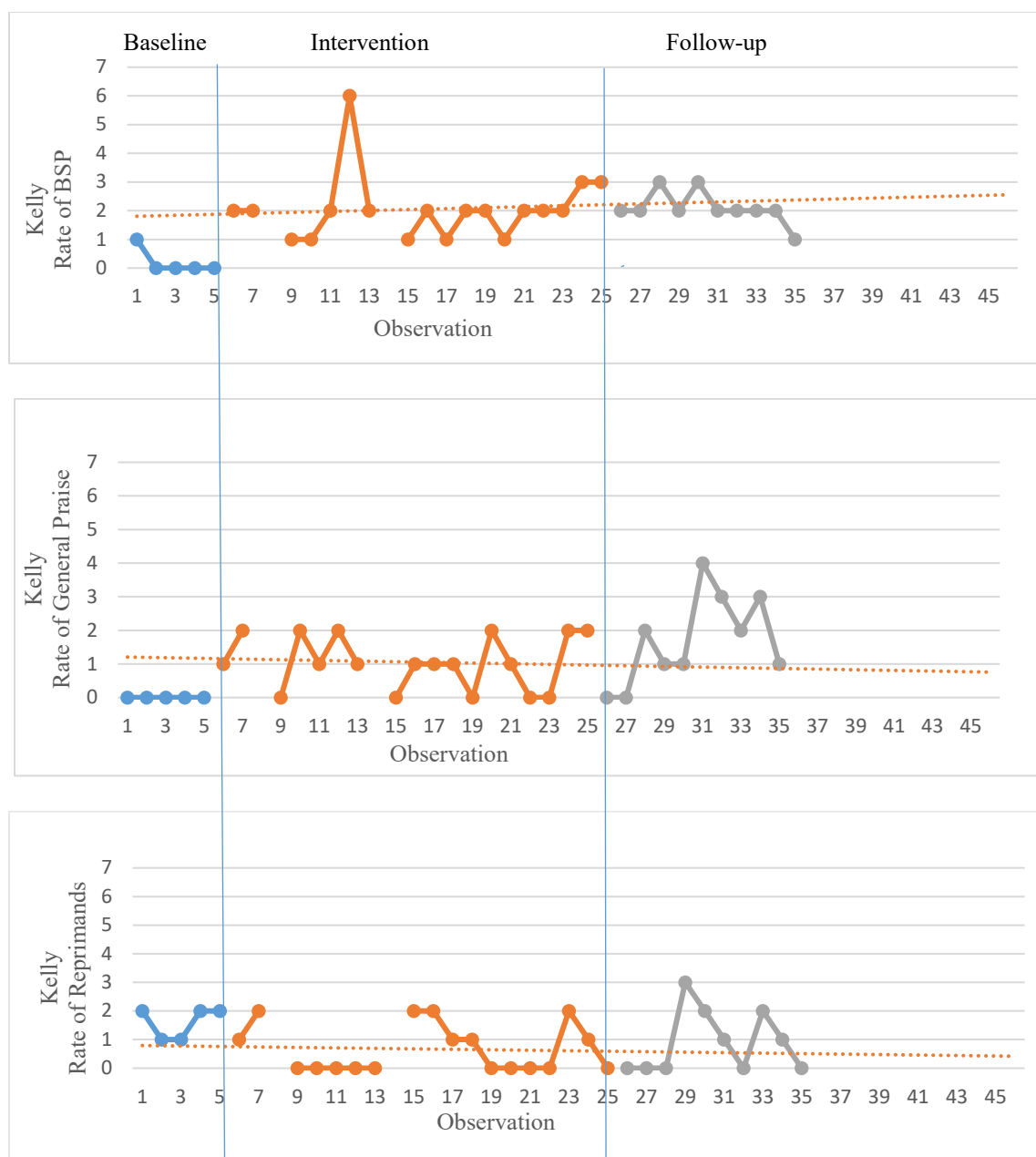


Figure 11. Comparison between BSP, general praise, and reprimands for Kelly

Tina, the second teacher, also demonstrated a positive trend in her rate of BSP provided to the target student with ED across the three phases of the study. She also exhibited a decreased trend in her use of general praise statements. Similar to Kelly, Tina also showed a decreased trend in reprimands (see Figure 12).

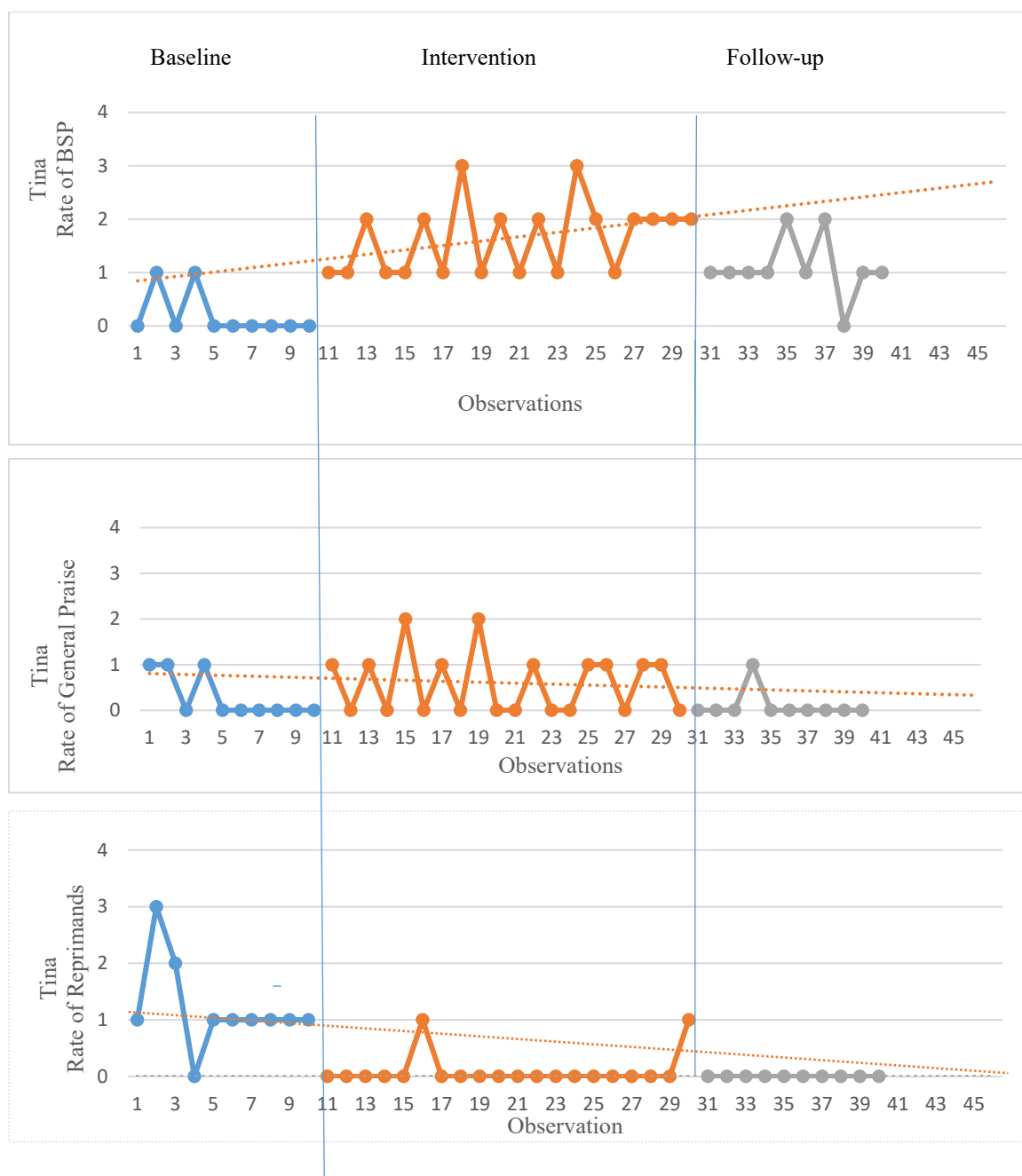


Figure 12. Comparison between BSP, general praise, and reprimands for Tina

Similar to Kelly and Tina, Katie also demonstrated a positive trend in her BSP statements across the three phases of the study design. Katie's rate of general praise statements consistently decreased from the baseline to the follow-up phase. The rate of reprimand statements provided to students with ED demonstrated a consistent decreased trend (see Figure 13).

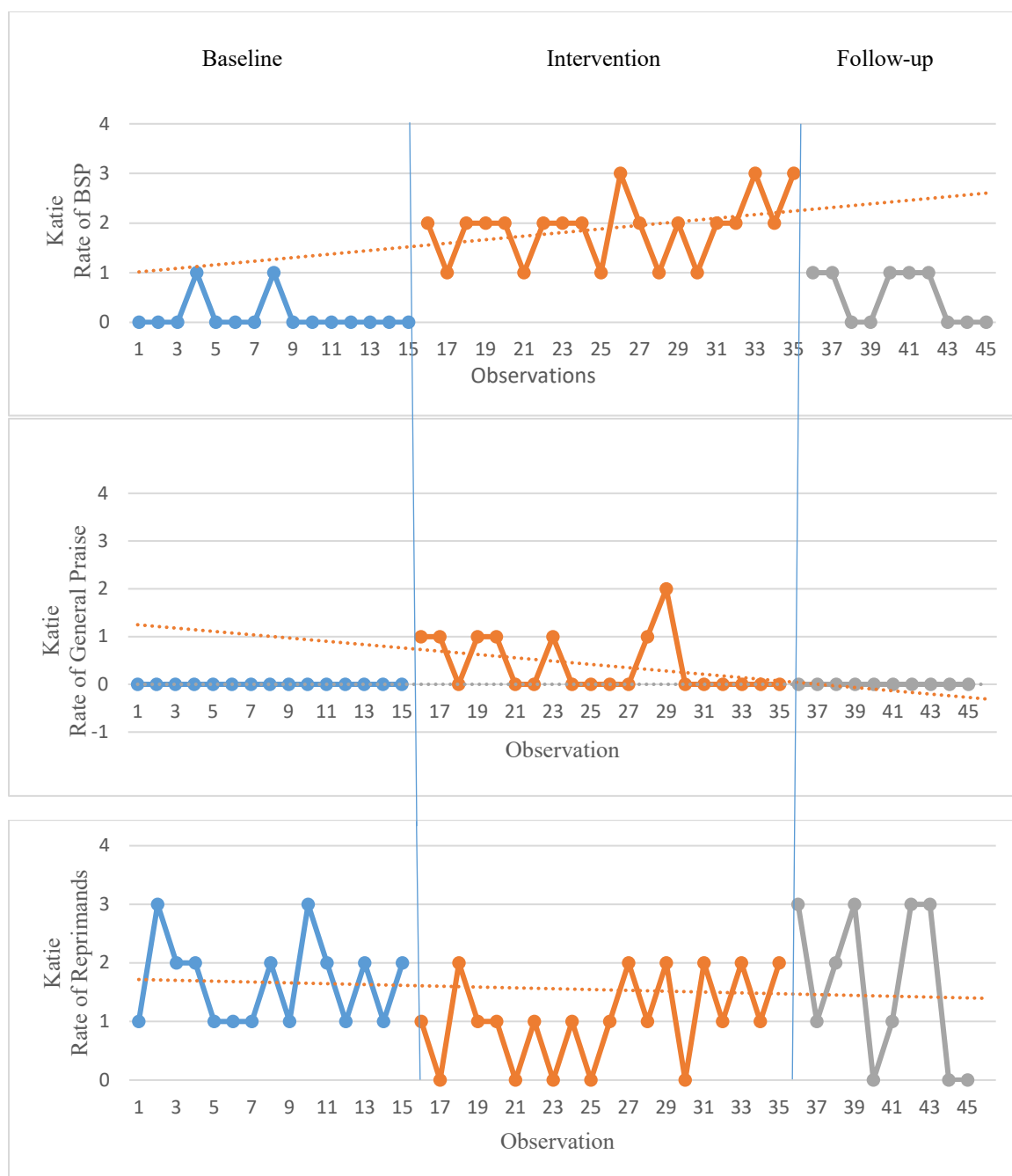


Figure 13. Comparison between BSP, general praise, and reprimands for Katie

Overall, when baseline, intervention, and follow-up trends are compared, a pattern emerged that showed an increase in the general education academic teachers' rate of BSP provided to the target student with ED in the general education classroom. Each teacher

also demonstrated a decrease in their rate of general praise and reprimand statements provided during classroom instruction to the target student with ED.

Social Validity

To evaluate the acceptability of using a within-school consultation intervention, each participant was asked to complete a social validity survey created by the researcher. The participants (teachers and observers) were asked to complete the survey after all direct observations and consultation meetings were completed. Both surveys consisted of two sections. The first section ranked questions using a Likert-like scale: 1 = *Completely Disagree* to 5 = *Completely Agree*. The second section consisted of open-response questions. The teacher survey included 11 Likert-like questions and 6 open-response questions. The observer survey included 7 Likert-like questions and 4 open-response questions. The results from the teacher and observer social validity surveys are discussed here.

Social Validity Ratings by Teachers

Overall results from the survey were positive, indicating that teacher participants were satisfied with the training process and the intervention. Teachers scored Items 5, 6, 7, 10, and 11 the highest ($M = 5$), indicating that teachers felt that increasing the use of BSP with students with ED is important, and they felt more confident in providing BSP as a means to change student behavior such as increasing on-task behavior. Teachers also indicated that providing BSP was easy to implement, and teachers planned to continue to use this strategy of providing frequent BSP in the future. All three teachers indicated that they would recommend this strategy of acknowledging positive behaviors to other teachers. Teacher answers to Question 3 ranged from 1 to 2 ($M = 1.3$), indicating that

teachers felt that classroom observations were unobtrusive and not too burdensome.

Table 11 outlines teacher ratings of social validity.

Table 11

Social Validity Ratings by Teachers

Survey Item	Mean (Range)
1. I found the training sessions on administering behavior-specific praise to be helpful.	4.6 (4-5)
2. I found the ongoing visual feedback (graph) to be helpful.	4.3 (4-5)
3. I found the ongoing classroom observations to be overly burdensome and intrusive.	1.3 (1-2)
4. I would recommend the process of training of consultation and feedback to other teachers in learning how to increase the rate of behavior-specific praise.	4.6 (4-5)
5. I feel increasing behavior-specific praise towards students with ED is important to work toward.	5.0 (0)
6. By the end of the study, I felt comfortable and confident using more frequent behavior-specific praise as a means to change behavior such as an increase of on-task behavior.	5.0 (0)
7. Overall, I found providing behavior-specific praise to be easy to implement.	5.0 (0)
8. I felt I significantly increased my use of behavior-specific praise towards students with ED during this project.	4.6 (4-5)
9. Please rate the extent to which you feel student behavior changed as a result of your increasing behavior-specific praise into your classroom.	4.3 (4-5)
10. I plan to continue to use this strategy of providing frequent behavior-specific praise for appropriate behaviors in the future.	5.0 (0)
11. I would recommend this strategy of more frequent acknowledging positive behaviors to other teachers in trying new methods of classroom management.	5.0 (0)

Six open-response questions focused on the enjoyable and least favorable aspects regarding training procedures and feedback sessions. Overall, the teachers found the training session enjoyable. One teacher noted that the trainings were “short and sweet.” Another teacher wrote that she enjoyed the process of discussing different ways to give feedback that was constructive to students. She then went on to say that she enjoyed interactions with the researcher because she felt she was knowledgeable and an expert in the area. While most teachers felt the training sessions to be beneficial, one teacher mentioned she would have liked to watch a live teacher who is good at the process of providing BSP in addition to the videos.

The responses regarding the enjoyable and beneficial aspects of the feedback sessions were positive. One teacher noted, “I enjoyed positive praise from the consultant.” Even though one teacher mentioned that she did not always like the results, she noted, “Meeting weekly helped me see my progress and helps me be more consistent with positive behavior correction. I became more self-aware in all my classes.” Another teacher found the resources on the variety of ways to provide feedback to students helpful. Another teacher wrote, “Great study. Thanks for being part of it.”

Along with the positive comments, two of the least enjoyable aspects were mentioned. One comment, “Made it difficult to provide praise when the student was not in the room,” was a frustration mentioned by a teacher who had a few days of missed opportunities to provide BSP and general praise in the classroom. Similarly, another teacher mentioned that she would have benefited from “More specific examples of providing feedback with examples of missed opportunities.” Overall, the teachers found the training and consultation process beneficial.

Social Validity by Observers

Overall results from the survey were positive, indicating that observer participants were satisfied with the training process and the process of data collection. Observers scored Items 1 and 4 the highest ($M = 5$), indicating that the training sessions were helpful and by the end of the study, the observers felt confident collecting frequency data as a means to increase the rate of BSP. Observers scored Item 2 the lowest ($M = 2.75$, range 1-5). Observers felt that the observations were not obtrusive or burdensome. In addition to the seven Likert-like survey questions, four open-response questions were also included. The four questions focused on training procedures and feedback. Observer ratings of social validity are summarized in Table 12.

Table 12

Social Validity Ratings by Observers

	Survey Item	Mean (Range)
1.	I found the training sessions on collection behavior-specific praise to be helpful	5.0 (0)
2.	I found the ongoing classroom observation to be overly burdensome and/or intrusive.	2.75 (1-5)
3.	I would recommend this process of data collection training to other paraprofessionals.	4.25 (4-5)
4.	By the end of the study, I felt comfortable and confident collecting the frequency of behavior-specific praise as a means to increase the rate of behavior-specific praise.	5.0 (0)
5.	Overall, I found the behavior-specific praise data collection process to be easy to implement.	4.5 (3-5)
6.	I felt I significantly increased my ability to collect the use of behavior-specific praise data towards the target student with ED during this project.	4.75 (4-5)
7.	Please rate the extent to which you feel student behavior changed as a result of our increasing behavior-specific during your observations in your classroom.	4.50 (3-5)

Overall, the observers felt the training helped them to understand the different types of praise and how the use of praise makes a difference in student behaviors. Although one observer felt that collecting data limited her interaction with students, another observer felt that collecting data helped with the understanding of student behavior. One observer noted, “I learned how effective praise could be to a student. I think when you collect data, kids do better.”

Observers felt the feedback procedure was beneficial to teachers; they noticed a change in words used with students while they were in the class. “They [the teachers]

became more conscientious of the direct positive statements made to the students,” commented one observer. Overall, the observers found benefits of praise and the process of data collection to monitor student behavior.

Reliability

Inter-Observation Agreement

To monitor the reliability of the direct teacher observations, 20% (24) of observations were simultaneously observed by two observers. During each of the three phases of the study, two observers, a primary and secondary observer, simultaneously collected data during the same 15-minute direct observation. At the conclusion of the observation, the two observers compared scores, and a percentage of IOA was calculated.

The percentage of IOA over phases was calculated by comparing the two observers' scores. The raters' scores were considered exact agreement if scores were 90% or had reached consensus if scores fell within 1 point below 90% (Brown et al., 2004). After each IOA observation, both observers compared tally marks in each category of data collected. If the scores were 1 point apart in the data collection of BSP, general praise, or reprimands, the observers reached consensus regarding the discrepancy in the score, and the final score was tallied.

The percent adjacent (reaching a score of plus or minus 1 point) agreement calculation allowed raters to not have to be retrained to reach the exact agreement, but rather a consensus (Brown et al., 2004). A total of 90% or above of agreement between the two raters established a level of IOA criteria over the three phases of the intervention and, therefore, the observers did not require additional training. If the IOA fell below 90% for any given week, raters were retrained. Weekly calculations of IOA occurred for

20% of the observations. The overall mean level of IOA across the three observers was 97 % agreement with a range of 96% to 99%.

Treatment Fidelity

Teacher intervention training consisted of two one-on-one 45-minute training sessions for each teacher. During the training sessions, the researcher provided each teacher with a Training Fidelity Checklist. As the researcher provided each step of the training, the teacher indicated it was completed (e.g., a check mark). At the termination of the training, the teacher signed the bottom of the page, indicating that all training steps had been completed. At the completion of the within-school consultation training, each teacher indicated that 100% of the steps had been met.

Within-school Consultation Sessions

Within-school consultation sessions occurred 10 times over the four-week intervention phase with each teacher. A consultation checklist was developed for the consultant to follow during each session to ensure treatment fidelity. A digital audio-recording of each session was created. An independent rater (secondary observer) randomly listened to 20 %, or six, of the recorded consultation sessions and compared the audio recordings to the consultation checklist to ensure treatment fidelity. Minimal discrepancies were identified between the consultation sessions and the checklists (see Table 13).

Table 13

Percentage of Within-schools Consultation Integrity

Participants	Week 1	Week 2	Week 3	Week 4	Total	Discrepancies
Kelly	100%	97%	100%	100%	99.25%	Allowed teacher to reflect
Tina	100%	100%	100%	97%	99.25%	Schedule next session
Katie	100%	93%%	100%	100%	98.25%	Establish a clear goal Schedule next session
Weekly Total	100%	96%	100%	99%	98.75%	

Once a week, the consultant and the independent rater met to discuss the results of the consultation fidelity checks. During the meeting, the independent rater identified the discrepancies found while comparing the audio-tape to the consultation fidelity checklist. The rater explicitly discussed which step of the consultation process was not completed or was partially completed. Each step had to be demonstrated with 100% fidelity in order for each step to be considered complete.

During Week 1, the treatment fidelity total was 100%. The total for Week 2 was 96%. The discrepancies found during Week 2 consisted of elimination of Step 6--*What would you do differently?*, Step 8--*Establishing a clear goal*, and Step 9--*Scheduling the next session*. During Week 3, treatment fidelity was 100% with no identified discrepancies. Week 4 had a slight decrease in treatment fidelity with 98.25% and one discrepancy identified, the elimination of Step 9 regarding scheduling a consultation next session.

Teacher mean and range of treatment integrity were also calculated. The overall percentage mean level for each teacher was calculated by counting the number of consultation steps completed, dividing the total of steps eliminated, and multiplying by 100. The mean level for Kelly and Tina was 99.25 (range 97 to 100). The mean level for Katie was 98.25 with a range of 93 to 100. Overall, the mean level for all three teachers was 98.75 with a range of 98.25 to 99.25. The overall consultation intervention occurred with a high percentage of fidelity of 98.75%.

Summary of Result Findings

Visual inspection of the data across participants and phases of the study indicated that consultation with visual performance feedback had a positive impact on the rate of BSP, general praise, and reprimands teachers provided to target students with ED during academic instruction. During the introduction of the intervention, a pattern emerged in which all three of the teachers demonstrated an increase in BSP and general praise statements while simultaneously demonstrating a decrease in reprimand statements. However, all three teachers had difficulty maintaining the levels of BSP, general praise, and reprimands once the interventions were terminated. While the three teachers demonstrated increases in BSP and general praise statements and decreases in reprimands during the intervention, the achievement of a 4 to 1 ratio of BSP to reprimands was only obtained by one participant.

Each of the three teachers demonstrated similar trends across the three phases of the study (baseline, intervention, and follow-up). All three teacher participants demonstrated an increased rate of BSP statements provided to the target student with ED in the general education academic classroom. Additionally, each teacher decreased their

use of general praise and reprimand statements, indicating that the within-school consultation intervention with visual feedback can impact the rate of BSP general education academic teachers provide to students with ED.

The overall results of the social validity scale for teachers and observers were positive. Teachers were satisfied with the training and the use of the within-schools consultation intervention. Teachers also indicated that BSP was an easy intervention to use and planned to continue to implement this intervention in the future. Additionally, all three participants indicated that they would recommend this intervention of providing behavior-specific praise to students with ED to other teachers.

The results of the social validity survey were also positive for observers. Each observer specified that learning the different types of praise was beneficial. Additionally, each observer indicated that the data collection was easy to implement. All four observers indicated that they would recommend the training procedures and data collection process to other paraprofessionals.

CHAPTER V

DISCUSSION

Students identified with emotional disabilities (ED) are being included in the general education academic classrooms with more frequency (Peebles & Mendaglio, 2014). However, most teachers have minimum training or exposure to the complex behaviors and interventions associated with students with ED (Duchaine et al., 2011). When faced with challenging behaviors, teachers often respond with an overreliance on aversive practices such as an increase of reprimand statements (Lewis, Jones, Horner, & Sugai, 2010). If unsuccessful, the teacher may revert to more severe consequences such as removal from the classroom (Hollingshead, Kroeger, Altus, & Trytten, 2016). If the goal is to maximize opportunities for students with ED to academically and behaviorally succeed in every classroom, then such efforts can be enhanced when teachers engage in evidence-based practices and interventions that have been shown to be effective (Gable et al., 2012).

One such intervention is behavior-specific praise (BSP). The use of BSP has been shown to be an effective intervention for decreasing problem behaviors in the classroom. Unfortunately, studies have shown that teachers generally provide low rates of praise to secondary students and more so to secondary students with ED (Jenkins et al., 2015). In order to increase the use of BSP in the classroom, teachers may require on-going training and support in evidence-based practices to successfully positively impact student

behaviors in the classroom (Hershfeldt, Pell, Sechrest, Pas, & Bradshaw, 2012). Evidence suggests that frequent consultation support, involving performance feedback, may have positive changes in teachers' behaviors and, therefore, have a positive impact on student behaviors (Bethune & Wood, 2013).

The current study investigated the use of within-school consultation to increase middle school general education academic teachers' use of BSP used with students with ED. A secondary focus of the study was to examine whether within-school consultants change the rate of general praise and reprimand statements used by teachers when providing instruction to students with ED in middle school general education academic classrooms.

Discussion of Results

This study provides evidence for the positive effects of using within-school consultation intervention for general education middle school teachers. To monitor experimental control, three demonstrations of effect were observed across three participants during three different points in the study.

Teacher Outcomes

The results of this study further support the benefits that the use of within-school consultation intervention has on changing teacher behaviors in the classroom. Across all participants, visual inspection indicated positive effects when the within-school consultation intervention was introduced. The results for each question are summarized below.

Rate of Behavior-Specific Praise

The overall baseline results were low and stable for all three teachers. The findings from this present investigation were consistent with results by Floress and Jenkins (2015) which found a higher rate of praise directed towards kindergarten students (47.3 total praise statements per hour); however, a downward trend of BSP occurred as teachers taught students in the upper grades. The low baseline results support that general education academic teachers are minimally and inconsistently providing BSP at the secondary level to students with ED.

During baseline, all three teachers provided limited BSP statements to the target student with ED during 15-minute observations. These results support the findings of White (1975) and Reinke et al. (2013) which indicated that secondary students receive less praise compared to elementary students. White (1975) reported the rates of praise provided from 1st grade through 12th grade. The results indicated a declining rate of praise statements provided to students in the classroom, from 43.7 praise statements per hour in the elementary classroom to 8.4 praise statements per hour by the 12th grade. More recently, Reinke et al. (2013) found kindergarten teachers provided BSP seven more times per hour than in Grades 1-6. The results also coincide with Brophy's (1981) findings that praise rates decrease as students progress through grades.

Additionally, the current research findings also support research by Hawkins and Heflin (2011) which suggested that students with ED receive even lower rates of BSP compared to other disability categories. Through the use of direct observation, the researchers found students with ED received 4.4 praise statements per hour compared to students with intellectual disabilities (11.4 per hour) and multiple disabilities (13.5 per

hour). The low baseline results of this study were lower than the findings by Hawkins and Heflin (2011) with $M = 1.8$. The results from this study support findings that BSP rates continue to be underused by teachers of students at the secondary level and more so with secondary students with ED (Rathel et al., 2014), even though the use of BSP has long-documented effectiveness.

Overall, the three teachers in the current study increased their rate of BSP provided to the target student with ED during academic instruction. The three teachers increased their rate of BSP by 163%, indicating that the use of consultation with visual performance feedback appeared to be an effective intervention for increasing teachers' use of BSP with students with ED. These results support the findings of Briere et al. (2015) which found the use of consultation with visual feedback increased teachers' rate of BSP from 0.0 to 0.4 BSP at baseline to 1.3 to 2.45 BSP statements per minute during the intervention.

Follow-Up

The overall results of BSP during the follow-up phase were mixed. While the rate of BSP following the intervention phase resulted in a 40% average decrease for two of the three teachers, the range of BSP statements provided during follow-up increased from zero to one per 15-minute observation. The results of the current study support the findings by Dufrene et al. (2014) which indicated that without the continued consultation support with feedback, few teachers would maintain the level of intervention on their own. Research suggests that once consultation and visual performance concludes, the rates of use of BSP and praise decreases or may revert to baseline (Reinke et al., 2008; Dufrene et al., 2014).

General Praise

The use of the within-school consultation intervention increased general praise statements across participants. The rate of general praise provided across teachers during baseline ranged from zero to four ($M = 0.10$, $SD = 0.31$) general praise statements per 15-minute observation, to zero to two during intervention ($M = 0.68$, $SD = 0.75$), and to zero to four during the follow-up phase ($M = 0.53$, $SD = 1.07$). While general praise decreased across participants, general praise increased for students with ED. Overall, the three teachers demonstrated a 149% increase in their rate of general praise provided to the target student with ED from the baseline to intervention phase.

Similar to the rates of BSP for all three teachers during baseline ($M = 1.8$), the teachers' rates of general praise were consistently low ($M = 0.1$). The low baseline across teachers supports that teachers are minimally and inconsistently providing praise statements to students with ED at the secondary level.

Although teachers were explicitly trained in and attended consultation sessions with visual feedback to increase their use of BSP, each teacher increased their rate of general praise. These results support the findings of Brophy (1981) and Gable et al. (2009), indicating that teachers are more likely to use general praise than BSP, even though existing studies recommend the use of BSP and have demonstrated a positive impact on student behavior. According to Floress and Jenkins (2015), teachers may choose to use general praise because it comes more naturally, whereas providing BSP requires more effort.

Reprimand

Overall, the use of the within-school consultation intervention decreased reprimand statements across teachers. Reprimands ranged from zero to three ($M = 1.5$, $SD = 0.73$) at baseline, to zero to two ($M = 0.60$, $SD = 0.78$) during intervention, to zero to three ($M = 0.83$, $SD = 1.17$) during follow-up. Although the three teachers demonstrated an 85% increase from baseline to intervention, two of the three teachers reverted to baseline when not receiving consultation support. Overall, the within-school consultation intervention decreased the reprimand statements across participants by 82% from baseline to intervention, indicating that within-school consultation intervention can be effective in supporting teachers' decrease in rates of reprimands directed to students with ED.

Social Validity of Within-School Consultation

Social validity measures the acceptability and satisfaction of intervention procedures (Luiselli & Reed, 2011). If participants do not perceive the intervention as beneficial and effective or feasible to implement, the intervention will not be sustained, and long-term behavior change will not occur (Brunsting et al., 2014; Fixsen, Blasé, Naoom, & Wallace, 2009). Additionally, assessing social validity is important when considering potential barriers to utilizing the intervention with high treatment fidelity (Reinke et al., 2007).

Overall, teachers in the current study reported that providing BSP statements to students with ED is important and easy to do. Teachers also indicated that they would recommend the strategy to other teachers. Teachers found benefit and value in the training and consultation sessions. Most noteworthy, however, were their ratings of the

consultation process. Teachers reported very strongly that they found the consultation to be beneficial and that consultation was a supportive and helpful modality for improving their use of BSP. Observers found the trainings beneficial by helping them understand the different types of praise options available. The teachers also felt that collecting data helped them more fully understand student behavior. The results of this study suggest that within-school consultation intervention may be an efficient way to train teachers to increase BSP towards target students. The use of a within-school consultation intervention that utilizes school staff provides collaborative support in tandem with visual feedback, which can promote a positive class culture.

Limitations

Although results from this study were hopeful for increasing teacher praise rates, several limitations should be considered when drawing conclusions. First, the results from this study should be interpreted with caution due to the small sample size impacting the generalization of the results. Although multiple baseline allows for replication within the study, the small sample size limits the generalization results.

In order to participate in the study, each teacher needed to meet the criteria for the study. Each teacher had to be a general education academic teacher and had to have had a student with ED enrolled in the classroom. Three teachers who taught students in Grades 6 and 7 met the criteria and participated in the study. Two of the three teachers represented sixth- and seventh-grade science, and the third teacher taught sixth-grade social studies. The limited variability of grades and academic subjects may have had a direct impact on the results. However, the positive effects of the intervention on the rate

of BSP demonstrated some indication that the intervention may be effective in other middle school academic classroom settings.

The time of year the study was conducted was another limitation of the study. The study was conducted during the last nine weeks of the school year. Teachers and students had just completed a week of spring vacation one week before the start of the study. This reintroduction of classroom rules and procedures may have impacted the rate of BSP and reprimands provided to the students. Since teachers and students were reestablishing the routines and procedures of the classroom, the teachers may not have been focused on opportunities for providing BSP, but more on reestablishing their classroom routine.

In addition to spring break, the teachers entered into a week of standardized testing during the third week of the study. The testing schedule had a direct impact on the everyday routine of the teachers and students. During testing, each student participated in each academic class; however, class time was shortened. As a result, teachers may have been more or less structured during classroom instruction. Some teachers allowed students to watch videos, while others concentrated on the curriculum. These scheduling disruptions may have contributed to fluctuations in the rates of BSP, general praise, and reprimands provided.

Student behavior was another limitation that may have impacted the study. Katie had two missed data points due to student behavior. The student was removed from class or showed up late due to disruptive behaviors demonstrated before or during her class. Katie noted in the comments section of the social validity survey that student attendance made it difficult to attain her personal goal of four BSP statements.

An additional limitation was the researcher's connection to the school. During the study, the researcher was employed as a special education teacher at the middle school selected for the study. Even though the researcher did not conduct direct observations or collect data in the classroom, the researcher assumed two roles in this study. During the beginning of the study, the researcher trained both teachers and observers in direct observation and the consultation intervention process. Once the trainings were completed, the researcher assumed the role of consultant and met with teachers during the four weeks of intervention. While the structure of the study was to use a within-school consultant (an employee of the school), dissimilar results may have been found if the researcher did not provide the training and provide consultation to the teachers.

Despite these limitations, the results from the current study demonstrate within-school consultation intervention was sufficient to increase BSP and general praise and decrease reprimands from the baseline phase to intervention. However, two of the three teachers were not able to maintain BSP rates after the termination of the intervention. Although the utilization of the within-school consultation intervention had impressive results of an increased average of 149% across the three teachers, starting at a zero baseline may not demonstrate a significant effect.

Implications

In spite of the stated limitations, the results from this study offer important preliminary implications regarding a within-school consultation intervention and middle school general education academic teachers' use of BSP, general praise, and decreased reprimands provided to students with ED during direct instruction. The findings are

important for teachers and school administrators who provide direct and indirect daily instruction to students.

Administrators. Evidence from this study and previous research (e.g., Bethune & Wood, 2013) suggests that one-time training or professional development may not provide enough support to effectively initiate or sustain a change in teacher behavior. Teachers may require additional on-going support to manage challenging behavior encountered in the classroom.

However, due to limited resources such as time, money, and materials, ongoing training may not be feasible within the financial constraints placed upon administrators (McGoey et al., 2014). The within-school consultation intervention builds capacity by eliciting the expertise of staff within the building. A strategy to build on this intervention would be to allow on-going collaborative support via consultation by fellow teachers without placing additional financial burdens on an already stretched budget.

Practitioners. In the present study, all three teachers demonstrated immediate changes in their use of BSP, general praise, and reprimands provided to the target students with ED following brief trainings and short consultation sessions with a fellow teacher. As noted in a study by Spratt et al. (2006), teachers would rather learn from other teachers. Through collaborative consultation, teachers who are the experts provide ongoing support to fellow teachers and, therefore, encourage intervention sustainability.

Students. Students with ED receive more reprimand statements compared to other disability categories (Jenkins et al., 2015). The use of BSP can be highly effective for promoting positive outcomes for students with ED (Kennedy et al., 2014). The use of BSP operating as a reinforcer may increase the probability that students with ED may

engage in appropriate behavior or response (Wheatley et al., 2009). Behavior-specific praise statements have been shown to be an effective evidence-based classroom management strategy that promotes positive academic and behavioral outcomes. However, teachers often default to reactive strategies such as reprimands to address challenging behaviors often demonstrated by students with ED in the classroom.

Recommendations for Future Research

Although this study had several limitations, this study offers new directions for future research. Despite its documented effectiveness, the use of BSP with students with ED still remains consistently underused by middle school academic teachers. The data from this study provide an opportunity to expand this area of research. The results of the current study indicate that the use of a within-school consultation intervention increases the use of BSP in the general education academic classroom. It stands to reason that student outcomes may improve as a result of this intervention. So, further research into measuring on-task behavior in conjunction with the within-schools consultation intervention is recommended.

It is also important to further examine the barriers associated with the implementation of BSP at the secondary level. There are important research concepts that should be addressed. For example, is the inconsistent use of BSP a product of preservice teacher education, or is it a culture of the elementary schools? Or, are elementary teachers predisposed to specific personality traits or skills so that they provide an increased rate of praise more compared to secondary teachers? Additionally, it is important to investigate why secondary general educators are using minimal or inconsistent rate of BSP and more so, why are general educators using minimal praise with students with ED in their

classroom. One characteristic associated with students with ED is the struggle with interpersonal relationships with peers and adults. The expansion of research in strategies to increase the rate of BSP provided to students with ED is essential since such a large body of research suggests that praise is a beneficial way to improve student behavior and improve relationships (Hollingshead et al., 2016).

Next, additional research is needed on practical, efficient, and cost-effective ways to effectively train and coach teachers to use, increase, and use optimal rates of praise in their daily instruction. Although research suggests that consultation is effective in improving a teacher's skills and competencies, further studies are needed to investigate reasons why the use of BSP is maintained and sustained once the consultation is terminated, or why it is not. Additionally, while the results of this study were promising in regard to increasing the rate of BSP after the use of a within-school consultation intervention, teachers failed to maintain the rate of BSP once the intervention was terminated. Future research is needed to investigate methods for improving the maintenance of BSP provided to students with ED.

Further research is also required to establish a consensus on the optimum rate of BSP for academic and behavior performance for secondary students with ED in the general education, special education, and self-contained classroom. Although there is evidence substantiating the benefits of BSP, the optimal or average rate of praise or ratio of BSP or BSP to reprimand statements has not readily been investigated in the literature.

Conclusion

The within-school consultation is an intervention designed to increase the likelihood of changes in teachers' behavior. Through one-on-one collaborative support with visual feedback, the intervention is delivered in a quick and efficient manner.

Findings from this study build on the research that has shown behavior consultation as an effective means to improve teachers' classroom practices (Briere et al., 2015). This study provides support that consultation may be an effective method for promoting BSP provided to a student with ED in the general education academic classroom which may increase student learning and appropriate student behavior.

Overall, within-school intervention with visual performance feedback may be an effective method for increasing teachers' classroom practices of using BSP. This study provided further evidence that secondary teachers inconsistently use BSP in the classroom directed towards students with ED, despite the large body of evidence that suggests its effectiveness. By providing general education academic teachers with on-going consultation with visual feedback through the use of within-school consultation model, significant changes in teacher behaviors may occur.

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APPENDIX A**FREQUENCY DATA COLLECTION TOOL**

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board

DATE: March 22, 2018

TO: Darrelanne Sundeen, MA

FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [1098247-1] The Effects of Within-Schools Consultation on General Education Teachers' Use of Behavior Specific Praise with Students with Emotional Disabilities

SUBMISSION TYPE: New Project

ACTION: APPROVAL/VERIFICATION OF EXEMPT STATUS

DECISION DATE: March 22, 2018

EXPIRATION DATE: March 22, 2022

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

Thank you for your patience with the UNC IRB process. This application is exceptionally well- prepared, clear and thorough.

All protocols and materials are verified/approved exempt and you may proceed with participant recruitment and data collection.

Please be sure to file any additional permission documentation obtained through District 6 associated with this study as an amendment to this UNC IRB application.

Best wishes with this relevant research.

Sincerely,

Dr. Megan Stellino, UNC IRB Co-Chair

We will retain a copy of this correspondence within our records for a duration of 4 years. If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

APPENDIX C

SCHOOL DISTRICT APPROVAL



**Weld County School District
Academic Achievement**

1025 NINTH AVENUE
GREELEY, COLORADO 80631

Dr. Stacie Datteri
Assistant Superintendent
of Academic Achievement

March 20, 2018

Ms. Darrelanne Sundeen,

Greeley-Evans School District 6 has approved your application to conduct the research project entitled: *The effects of within-school consultation on general education teachers' use of behavior specific praise with students with emotional disabilities* at Prairie Heights Middle School. We look forward to hearing the results of the study when you are finished.

Sincerely,

Dr. Stacie Datteri,
Assistant Superintendent
of Academic Achievement

APPENDIX D

TEACHER RECRUITMENT LETTER

Date: March of 2018

To: Teachers of general education classes at district middle school (meets the criteria for ED)

Subject: Research on teacher rate of behavior-specific praise and student on-task behavior in the classroom

Dear Teachers,

I'm sending out this letter to introduce myself to you and to gauge your interest in participating in a research study. The study will be conducted at Prairie Heights Middle School this spring as part of my dissertation research. My research interests revolve around identifying simple and effective classroom strategies that teachers can use to reduce the frequency of problematic behaviors in their classes.

For my dissertation, I hope to test the effectiveness of praise by training a few teachers how to implement behavior-specific praise (BSP) and then measuring the effects of student on-task behavior as observed in a classroom setting. This is where I need your help! My number one consideration in conducting this research in a practical school setting is to test the efficacy of a classroom management strategy in a way that is minimally burdensome to teachers and would require a very low time investment on your part. To that end, I will detail below everything that I would be asking of you as a participant in this study:

- 1) To allow an observer to conduct two 15-minute unobtrusive observations during instructional time (for the purpose of collecting data). The data will be collected during the same class period over 6-weeks.

- 2) Participants will attend two to three (a total of 90 minutes) consultation sessions with me, scheduled at your convenience, wherein I would train you on a method to enhance the use of behavior-specific praise in the classroom
- 3) To attempt to implement this strategy in your classroom after being trained
- 4) To meet with the researcher two to three times a week for a consultation session (approximately 15-minutes) to discuss data collected on the use of BSP with target students with ED.
- 5) To complete a very brief survey on your opinions about the strategy at the end of the study.

I want to assure you that if you do choose to participate, data from my observations will be kept strictly anonymous and will be used solely for the purposes of a) providing feedback to you, and b) determining the effectiveness of the strategy. If at any point you would like to withdraw from participation in the study, you would be free to do so without negative repercussions for you, your employer or your relationship with the University of Northern Colorado.

If after reading this, you'd like to hear more about participating, please contact me via email so that I can follow up with you. Thank you for your interest!

Darrel Sundeen, Ph.D. candidate University of Northern Colorado.

APPENDIX E**TEACHER CONSENT**



TEACHER CONSENT FORM FOR ASSISTANCE IN RESEARCH

UNIVERSITY OF NORTHERN COLORADO

Project Title: The Effects of Within-School Consultation on General Education Teachers' Use of Behavior Specific Praise with Students with Emotional Disabilities

Researcher: Darrelanne Sundeen., Doctoral Student, School of Special Education

Phone number: (970)673-6388

email: sund2274@bears.unco.edu

Purpose and Description: You are invited to participate in a research study to examine the effects of within-school consultation on general education teacher's implementation of targeted classroom management practice. The primary purpose of this study is to learn about effective ways to provide training and support to general education academic teacher's use of evidenced-based practice. During this 6-week study, you will be observed during one of your classes. For example, if you teach language arts, you will be observed in the same language arts class room over the 6-weeks of the study.

Days 1-3, you will be observed for two 15-minute intervals during one of your classes for the three days. During this time, an observer will be collecting frequency data on a targeted classroom management practice used in your classroom. The data collected will be given to the researcher and graphed.

Days 4-Day 5 Training: Over two-days, you will be asked to attend two 60-minute training sessions with the researcher focusing on a classroom management feedback strategy utilizing a Checklist for Effective Teacher Post Observation Feedback and a graphed data. During the first session of the training, you will be provided definitions, asked to watch videos on the strategy, and practice the classroom management strategy. You will also practice each step of the Checklist for Effective Teacher Post Observation Feedback. During the second training session, you will be asked to practice Checklist for Effective Teacher Post Observation Feedback. At the end of the second training session, you will receive the results of your classroom data that was collected over the first two-weeks. You and the researcher will review will the data (graph) and practice and complete the Checklist for Effective Teacher Post Observation Feedback.

Days 6-27, you will be observed for two 15-minute intervals. During the observations, an observer will collect frequency data (tally marks) on the use of a classroom management strategy. The data will be given to researcher to be graphed.

After every two 15-minute observations, you will meet with the researcher for 15-20 minutes to follow the Checklist for Effective Teacher Post Observation Feedback and

review the graphed data. This will occur within a 24-hour time frame. At the end of each consultation meeting, the next consultation meeting will be scheduled.

Day 28-36, you will be observed and will not meet with the researcher. At the end of week 7, you will be asked to complete a 15-item questionnaire to see how you felt about the effectiveness of strategies and consultation sessions.

You always have the option not to participate. If at any time, you would like to discontinue our involvement in the study, you may do so. The risks associated with the participation in this study are minimal. The participants may experience low levels of discomfort such as anxiety or stress from participating in numerous classroom observations. The benefits of the study may include the ability to learn or increase your use of an effective classroom strategy such as behaviors-specific praise. By increasing the use of BSP in your classroom, on-task behavior may increase. Please keep in mind you can decide to stop participating at any time without consequence. Specifically, your decision to participate in this study will not affect your employment. The data collected for this study will only be used for research. At the conclusion of the study, only summary data will be shared with school administrators. The data shared will not contain identifiers. (administrators will not be told which data is yours). We hope that you may learn or increase an effective classroom management practice. What we hope is that these changes may positively impact our classroom climate.

The following procedures will be used to protect the confidentiality of participant data. Access to all raw data such as teacher frequency data, student interval data, excel spreadsheets, consultation integrity checklists will be limited to the primary researcher and data collectors. To protect participant confidentiality, participants will be assigned random numbers and used for all participants. The random numbers will be used all times in all documents. A master spreadsheet with identifying numbers that link names with codes will be maintained in a sealed envelope in a separate secure location in the main school office. A hard copy of raw data will be stored in a locked file cabinet inside the school office. All electronic files (e.g., spreadsheet, database, graphs, etc.) containing identifiable information will be password protected. Any computer holding such files will also have password protection to prevent access by unauthorized users. Only the researcher will have access to the passwords. All raw and electronic data will be stored in a secured location (i.e., password protected computer locked file cabinet) for three years. Data will be stripped of identifiers and saved for three years. Fidelity data obtained via digital audio files will be transferred to a fidelity checklist and then erased. Your name will not be identified in any publications or presentations.

Upon completion, you will receive a \$50.00 gift card for my appreciation of your participation in this important study. Participation is voluntary. You may decide not to participate in this study, and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and have had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any

concerns about your selection or treatment as a research participant, please contact Sherry May, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970351-1910.

I have read this form and decided that I will participate in the project described above. Its general purpose, possible risks, and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

Subject's Signature _____ Date _____

Researcher's Signature _____ Date _____

APPENDIX F**OBSERVER CONSENT**



OBSERVER CONSENT FORM FOR ASSISTANCE IN RESEARCH

UNIVERSITY OF NORTHERN COLORADO

Project Title: The Effects of Within-School Consultation on General Education Teachers' Use of Behavior Specific Praise with Students with Emotional Disabilities

Researcher: Darrelanne Sundeen., Doctoral Student, School of Special Education

Phone number: (970)673-6388

email: sund2274@bears.unco.edu

Purpose and Description: You are invited to participate in a research study to examine the effects of within-school consultation on general education teacher's implementation of targeted classroom management practice. The primary purpose of this study is to learn about effective ways to provide training and support to general education academic teacher's use of evidenced-based practice.

Days 1- 3. You will attend a three 45-minute training session. During the sessions, you will learn the definitions of behavior-specific praise, general praise, and reprimands. The second session of training will include watching videos and learning and practicing how to code data. The third session will be asking you to code data by yourself. You will also be asked to and take a short quiz on the definitions of behavior-specific praise, general praise, and reprimands.

Weeks- 2- 6. You will be asked to directly observe a general education academic teacher during classroom instruction and collect frequency data on the teacher's use of behavior-specific praise, general praise and reprimands toward a targeted student (student with ED). Each classroom observation will be 15-minutes in duration. You will observe the same teacher in the same class. At the end of each observation, you will be asked to place the data collection sheet in a sealed envelope and place it in a secured locked file cabinet.

Week 6. At the end of week 6, you will be asked you to complete a 15-item questionnaire to see how you felt about the effectiveness of strategies.

You always have the option not to participate. If at any time, you would like to discontinue our involvement in the stud, you may do so. The risks associated with the participation in this study are minimal. The participants may experience low levels of discomfort such as anxiety or stress from participating in numerous classroom observations. The benefits of the study may include the ability to learn or increase your use of an effective classroom strategy such as behaviors-specific praise. By increasing the use of BSP in the classroom, on-task behavior may increase. Please keep in mind you can decide to stop participating at any time without consequence. Specifically, your decision

to participate in this study will not affect your employment or evaluation. The data collected for this study will only be used for research. At the conclusion of the study, only summary data will be shared with school administrators. The data shared will not contain identifiers. (administrators will not be told which data belongs to you).

We hope that you may learn or increase an effective classroom management practices. We hope is that these changes may positively impact our classroom climate.

The following procedures will be used to protect the confidentiality of participant data. Access to all raw data such as teacher frequency data, student interval data, excel spreadsheets, consultation integrity checklists will be limited to the primary researcher and data collectors. To protect participant confidentiality, participants will be assigned random numbers and used for all participants. The random numbers will be used all times in all documents. A master spreadsheet with identifying numbers that link names with codes will be maintained in a sealed envelope in a separate secure location in the main school office. A hard copy of raw data will be stored in a locked file cabinet inside the school office. All electronic files (e.g., spreadsheet, database, graphs, etc.) containing identifiable information will be password protected. Any computer holding such files will also have password protection to prevent access by unauthorized users. Only the researcher will have access to the passwords. All raw and electronic data will be stored in a secured location (i.e., password protected computer locked file cabinet) for three years. Data will be stripped of identifiers and saved for five years. Your name will not be identified in any publications or presentations. Fidelity data obtained via digital audio files will be transferred to a fidelity checklist and then erased.

Upon completion, you will receive a \$50.00 gift card for my appreciation of your participation in this important study. Participation is voluntary. You may decide not to participate in this study, and if you begin participation, you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and have had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970351-1910.

I have read this form and decided that I will participate in the project described above. Its general purpose, possible risks, and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

I have read this form and decided that I will participate in the project described above. Its general purpose, possible risks, and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

Participant
Date

Print Name

Signature of Person
Date

Print Name

Obtaining Consent

APPENDIX G

EFFECTIVE PRAISE DESCRIPTION AND GUIDELINES

EFFECTIVE PRAISE DESCRIPTION AND GUIDELINES

(Adapted from (Brophy, 1981; Sweigard, Landrum, & Pennington, 2015)

Behavior-specific praise is delivered:

1. **Contingently** - provided immediately following the desired behavior
2. **Specifically** - be **focused** and **precise** about the behavior receiving the praise

Example "Carrie, you are being very responsible by cleaning up your work area. "

3. **Spontaneously, varied, and credibly**- recognize effort and success by acknowledging student's accomplishment. Example "Nancy, you worked hard on your comprehension essay after saying it would be impossible to complete on your own. I am impressed and think you did a fantastic job! "

4. **Effectively** in establishing an implication that **similar success** will be expected in the future. Nurture appreciation of task-relevant behavior and focus student attention on their task-relevant behavior(s). Example "Nice work, Group 1, you have all been working cooperatively together

throughout this assignment. I like how you were respectful of other opinions and stayed on-task. How did your behavior help make this task a success and help you learn?

APPENDIX H

EXAMPLES BEHAVIOR SPECIFIC PRAISE (BSP), GENERAL PRAISE, AND REPRIMANDS

BEHAVIOR SPECIFIC PRAISE (BSP), GENERAL PRAISE, AND REPRIMANDS
Adapted from Kathleen Lane, 2013

What is BSP?

Praise statements is a form of positive reinforcement that include reference to the specific behavior for which the student is being recognized (Brophy, 1981; Sutherland, Wehby, & Copeland, 2000).

Key Components (Haydon, Musti-Rao, 2011, p. 31):

- Praise statement must be linked to a behavior
- Provide feedback specific to the behavior
- Be sincere
- Reflect skill level
- Evaluate effectiveness
- Praise effort – not ability

Examples:

- “Bob, great job showing your work on your math homework.”
- “I appreciate how you pushed in your chair on the way to line up for lunch. That keeps the walkways safe.”

Non-Examples:

- Non-Examples of behavior specific praise does not provide feedback specific to the observed behavior.

What is General Praise?

A praise statement or gesture that does not identify the behavior that caused the praise to be given.

Examples:

- Congratulations, Marty!
- Good for You!
- Nice Going!
- A thumbs up sign.

What is a reprimand?

A Reprimand is a criticism or a verbal expression of disapproval by the teacher addressed to a student (Merrett & Wheldall, 1992). Reprimands did not include feedback.

- Examples: You are acting immature.”
- Sit down right now.
- I’m not going to tell you again to stop talking to Oscar.

APPENDIX I

**RATIONALE AND RESEARCH FOR
BEHAVIOR- SPECIFIC PRAISE**

RATIONALE AND RESEARCH FOR BEHAVIOR- SPECIFIC PRAISE

Why is BSP effective? (Marchant & Anderson, 2012; Kennedy & Jolivet, 2008; Stormont & Reinke, 2009)

- Simple, effective, requires minimal effort
- Instructional feedback delivered at a rate of four positive to one negative (4:1 ratio; Myers, Simonsen, & Sugai, 2011)
- Establishes supportive and positive classroom environment

When is BSP most effective?

- When delivered consistently and immediately after desired behavior
- When teachers use strategies to intentionally increase their rate of BSP and target their delivery of BSP to identified students (Thompson, Marchant, Anderson, Prater, & Gibb, 2012).
- **IFEED-AV** (Rhode, Jenson, & Reavis, 1992)
 - Immediately,
 - Frequently,
 - Enthusiasm,
 - Eye Contact,
 - Describe,
 - Anticipation,
 - Variety

Benefits (Lampi, Fenty, & Beaunae, 2005; Marchant & Anderson, 2012; Stormont & Reinke, 2009):

- Takes little effort and costs nothing
- Improves student- teacher relationships
- Not time consuming or intrusive
- Increases on-task behavior and reduces problem behavior
- Increases positive social and academic behaviors

Challenges:

- Determine students' preferred method of praise – public or private
- Consider the needs of students who are more motivated by escaping tasks or activities rather than accessing teacher attention

Research:

- Increasing preschool student's on-task behavior during transitions in inclusion classrooms (Fullerton, Conroy, & Correa, 2009)
- Increasing teachers' use of behavior specific praise in self-contained classrooms (Hawkins & Helfin, 2011)
- Increasing time spent inside the classroom in a residential facility (Kennedy & Jolivette, 2008)

APPENDIX J**TRAINING VIDEOS**

TRAINING VIDEOS

Observer

- Elementary example of behavior-specific praise
<https://www.youtube.com/watch?v=8ml1tih5zSY>
- Examples of behavior-specific praise across grades
<https://www.youtube.com/watch?v=COBkoetpLwM>
- Example of Middle school behavior-specific praise
<https://www.youtube.com/watch?v=0dcQuyK5Pqg>
- Elementary 4:1 Praise
<https://www.youtube.com/watch?v=XuQCHier2zs>
- High school example of 4:1 praise with corrections
<https://www.youtube.com/watch?v=Q3wpviS5gaQ>
- Elementary behavior-specific praise
<https://www.youtube.com/watch?v=qn6dem90RIE>

Teacher

- Description of Praise
<https://www.youtube.com/watch?v=ud4y-V9QBzU>
- Description and examples of behavior-specific and general praise
<https://www.youtube.com/watch?v=6CjZRKpGHVg>
- High school example of 4:1 praise with corrections
<https://www.youtube.com/watch?v=Q3wpviS5gaQ>

APPENDIX K

**TREATMENT INTEGRITY CHECKLIST:
OBSERVER TRAINING**

Observer Fidelity Training checklist

In order to ensure that each participating observer will be trained in a standardized manner, the training session has been broken down the training into three sessions. Each session will have several key components. Please circle each number associated with each component that you feel has been adequately completed and you understand in this session.

Researcher will provide

1. Theory/rationale behind using praise to positively influence student behavior

Not at all	Somewhat	Very well
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2. Research supporting the use of increased behavior specific praise in the classroom.

Not at all	Somewhat	Very well
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3. Operational definitions of general praise, behavior-specific praise, and reprimands.

Not at all	Somewhat	Very well
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4. Key components of behavior-specific praise: specific, contingent, and genuine

Not at all	Somewhat	Very well
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4. Examples of BSP and general praise statements, and reprimands.

Not at all	Somewhat	Very well
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5. Examples of effective, less-effective, and ineffective praise statements

Not at all	Somewhat	Very well
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6. Explanation of the data collection form (frequency recording).

Not at all	Somewhat	Very well
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7. Video examples of teacher demonstrating use of general praise, behavior-specific praise, and reprimands

Not at all	Somewhat	Very well
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8. Opportunity to practice collecting data using examples with feedback

Not at all	Somewhat	Very well
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9. Opportunity to collect data and be evaluated by researcher

Not at all	Somewhat	Very well
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10. Opportunity to ask questions

Not at all	Somewhat	Very well
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Observer Signature

APPENDIX L

**TREATMENT INTEGRITY CHECKLIST:
TEACHER TRAINING**

TREATMENT INTEGRITY CHECKLIST: TEACHER TRAINING

In order to ensure that each participating teacher is trained in a standardized manner, the consultation session has been broken down the training into its key components. Please circle each number associated with each component that you feel has been adequately completed and you understand in this session

1. Theory/rationale behind using praise to positively influence student behavior

Not at all	Somewhat	Very well
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2. Research supporting the use of increased behavior specific praise in the classroom.

Not at all	Somewhat	Very well
------------	----------	-----------

3. Key components of behavior specific praise: specific, contingent, genuine

Not at all	Somewhat	Very well
------------	----------	-----------

4. Examples of BSP and general praise statements

Not at all	Somewhat	Very well
------------	----------	-----------

5. Examples of effective, less-effective, and ineffective praise statements

Not at all	Somewhat	Very well
------------	----------	-----------

6. Video example of teacher demonstrating use of behavior-specific praise

Not at all	Somewhat	Very well
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7. Opportunity to practice using examples with feedback

Not at all	Somewhat	Very well
------------	----------	-----------

8. Presentation of baseline BSP, general praise and reprimand data and operational definitions

Not at all	Somewhat	Very well
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9. Digital audio-tape instructions

Not at all	Somewhat	Very well
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10. Excel spread sheet, data, and understanding the data

Not at all	Somewhat	Very well
------------	----------	-----------

11. Goal-setting and description of verbal and visual feedback (graph)

Not at all	Somewhat	Very well
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12. Opportunity to ask questions

Not at all	Somewhat	Very well
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Teacher Signature

APPENDIX M**CHECKLIST EFFECTIVE FOR TEACHER
POST OBSERVATION FEEDBACK**

CHECKLIST FOR EFFECTIVE TEACHER POST OBSERVATION FEEDBACK

During each consultation meeting, the teacher-mentor pairs will employ the following post observation routine (adapted from Sprick et al., 2006; Uncommon Schools, 2017):

Consultant Materials:

Digital audio recording device
Graph of observations
Checklist for Effective Feedback
Review of BSP, general praise, and reprimands

Teacher Materials:

Calendar
Questions

	Introduction Start Digital Audio Tape (STATE DATE OF SESSION)
	<p>What to say:</p> <p>Start digital audio tape.</p> <p>Verbally state date on audio tape before starting consultation session. For example, “November 21, 2017” (Consultant)</p> <p>“Discuss one success and one struggle from the previous observations (teacher answers)</p> <p>“Discuss intervention effectiveness” (teacher answers)</p>
	Review Data
	<p>What to say:</p> <p>“Let’s look at the Excel graphed data of your rate of BSP, general praise, and reprimands. During our previous consultation session, you set a goal of _____. By reviewing the graph do you think you met the goal?”</p> <p>What do you think made you successful? or “What challenges did you face? What would you do differently? How do you feel?</p>
Revise Goal	Goal Setting
	<p>What to say:</p> <p>“After reviewing your previous goal of ___, let’s establish a new goal for this week.”</p>
Schedule	Next observation
	<p>What to say:</p> <p>“Our next observation will be _____. “</p>

Conclusion	Conclusion
	What to Say: “Thank you for meeting with me today. “Do you have any questions?” At end of session, turn off digital audio tape.
Materials	Materials
	Place weekly observation data collection sheets, graph, and observation checklist, and digital recorder in a sealed envelope. Turn into administration office. Researcher will pick it up from locked cabinet located in principal’s office.

APPENDIX N**TEACHER SOCIAL VALIDITY SURVEY**

Please rate the extent in which you agree or disagree with the following statements regarding your experience participating in this study.

Questions about the training, consultation process, and visual feedback

- 1) I found the training sessions on administrating behavior-specific praise to be helpful.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 2) I found the ongoing visual feedback (graph) to be helpful.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 3) I found the ongoing classroom observations to be overly burdensome and/or intrusive.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 4) I would recommend this process of training of consultation and visual feedback to other teachers in learning how to increase on-task behavior (this question refers to training and not to the actual intervention).

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

Questions about the Behavior-Specific Praise strategy

- 5) I feel that increasing on-task behavior for students with ED is an important outcome to work toward.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 6) By the end of the study, I felt comfortable and confident using more frequent behavior- specific praise as a means to increase on-task behavior.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 7) Overall, I found providing behavior-specific praise to be easy to implement.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 8) I feel I significantly increased my use of behavior specific praise towards student with ED during this project.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 9) I think the student behavior changed as a result of our increasing behavior-specific praise into your classroom.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 10) I plan to continue to use this strategy of providing frequent behavior-specific praise for appropriate behaviors in the future

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 11) I would recommend this strategy of more frequently acknowledging positive behaviors to other teachers interested in trying new methods of classroom management.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

Open-Response Questions

*Your honest feedback is welcome and much appreciated. Please type your response below each question. Your comments will be used to a) help determine the effectiveness, helpfulness, and feasibility of this method of teacher consultation and classroom management, and b) help me to become more helpful to teachers in the future. Don't worry, I will not be offended so please be honest. *

12) What aspect(s) did you find helpful or enjoyable about the training procedure as a method of learning a new teaching skill?

13) What aspect(s) did you find helpful or enjoyable about the feedback procedure as a method of learning a new teaching skill?

14) What aspect(s) did you find least helpful or enjoyable about the training procedure as a method of learning a new teaching skill?

15) What aspect(s) did you find least helpful or enjoyable about the feedback procedure as a method of learning a new teaching skill?

16) What suggestions would give in order to improve this method of teacher training in the future?

17) (optional) Please provide any additional comments that you feel that did or did not work well with the training or consultation process.

APPENDIX O**OBSERVER SOCIAL VALIDITY SURVEY**

Please rate the extent in which you agree or disagree with the following statements regarding your experience participating in this study.

Questions about the training, consultation process, and visual feedback

- 1) I found the training sessions on collecting behavior-specific praise to be helpful.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 2) I found the ongoing classroom observations to be overly burdensome and/or intrusive.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 3) I would recommend this process of training of consultation and visual feedback to other teachers in learning how to increase on-task behavior (this question refers to training and not to the actual intervention).

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 4) By the end of the study, I felt comfortable and confident using more frequent behavior- specific praise as a means to increase on-task behavior.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 5) Overall, I found providing behavior-specific praise to be easy to implement.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

- 5) I feel I significantly increased my ability to collect the use of behavior-specific praise towards students with ED during this project.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

6) Please rate the extent to which you feel student behavior changed as a result of our increasing behavior-specific praise into your classroom.

Completely Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree
1	2	3	4	5

Open-Response Questions

Your honest feedback is welcome and much appreciated. Please type your response below each question. Your comments will be used to a) help determine the effectiveness, helpfulness, and feasibility of this method of teacher consultation and classroom management, and b) help me to become more helpful to teachers in the future. Don't worry, I will not be offended so please be honest.

7) What aspect(s) did you find helpful or enjoyable about the training procedure as a method of learning a new teaching skill?

8). What aspect(s) did you find helpful or enjoyable about the feedback procedure as a method of learning a new teaching skill?

9) What aspect(s) did you find least helpful or enjoyable about the training procedure as a method of learning a new teaching skill?

10) What aspect(s) did you find least helpful or enjoyable about the feedback procedure as a method of learning a new teaching skill?

11) What suggestions would give in order to improve this method of teacher training in the future?

12) (optional) Please provide any additional comments that you feel that did or did not work well with the training or consultation process.